MEETING

STATE OF CALIFORNIA

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

BOARD OF ADMINISTRATION

INVESTMENT COMMITTEE

OPEN SESSION

ROBERT F. CARLSON AUDITORIUM

LINCOLN PLAZA NORTH

400 P STREET

SACRAMENTO, CALIFORNIA

TUESDAY, FEBRUARY 16, 2016 9:00 A.M.

JAMES F. PETERS, CSR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 10063

APPEARANCES

COMMITTEE MEMBERS:

Mr. Henry Jones, Chairperson

Mr. Bill Slaton, Vice Chairperson

Mr. John Chiang, also represented by Mr. Frank Moore, Mr. Grant Boyken

Mr. Richard Costigan

Mr. Rob Feckner

Mr. Richard Gillihan, represented by Ms. Katie Hagen

Ms. Dana Hollinger

Mr. J.J. Jelincic

Mr. Ron Lind

Ms. Priya Mathur

Ms. Theresa Taylor

Ms. Betty Yee

STAFF:

Ms. Anne Stausboll, Chief Executive Officer

Ms. Cheryl Eason, Chief Financial Officer

Mr. Ted Eliopoulos, Chief Investment Officer

Mr. Matt Jacobs, General Counsel

Mr. Doug McKeever, Deputy Executive Officer

Mr. Eric Baggesen, Managing Investment Director

Ms. Natalie Bickford, Committee Secretary

Ms. Kit Crocker, Investment Director

APPEARANCES CONTINUED

STAFF:

- Mr. Todd Mattley, Investment Officer
- Mr. John Rothfield, Investment Director
- Ms. Anne Simpson, Investment Director
- Mr. Wylie Tollette, Chief Operating Investment Officer
- Mr. Paul Zhang, Investment Manager

ALSO PRESENT:

- Mr. David Altshuler, StepStone Group
- Mr. Andrew Bratt, Pension Consulting Alliance
- Ms. Rose Dean, Wilshire Consulting
- Mr. Allan Emkin, Pension Consulting Alliance
- Ms. Christy Fields, Pension Consulting Alliance
- Mr. David Glickman, Pension Consulting Alliance
- Mr. Andrew Junkin, Wilshire Consulting
- Mr. Mike Moy, Pension Consulting Alliance
- Mr. Michael Ring, Service Employees International Union

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1 PROCEEDINGS 2 CHAIRPERSON JONES: I would like to call the 3 Investment Committee meeting to order. Thank you. And the first order of business is 4 5 the roll call, please. COMMITTEE SECRETARY BICKFORD: Henry Jones? 6 7 CHAIRPERSON JONES: Here. 8 COMMITTEE SECRETARY BICKFORD: Bill Slaton? 9 VICE CHAIRPERSON SLATON: Here. 10 COMMITTEE SECRETARY BICKFORD: Michael Bilbrey? CHAIRPERSON JONES: Excused. 11 COMMITTEE SECRETARY BICKFORD: John Chiang 12 13 represented by Frank Moore? 14 ACTING COMMITTEE MEMBER MOORE: Here. 15 COMMITTEE SECRETARY BICKFORD: Richard Costigan? 16 COMMITTEE MEMBER COSTIGAN: Here. 17 COMMITTEE SECRETARY BICKFORD: Rob Feckner? COMMITTEE MEMBER FECKNER: Good morning. 18 COMMITTEE SECRETARY BICKFORD: Richard Gillihan 19 20 represented by Katie Hagen? 21 ACTING COMMITTEE MEMBER HAGEN: Here. COMMITTEE SECRETARY BICKFORD: Dana Hollinger? 22 23 COMMITTEE MEMBER HOLLINGER: Here. 2.4 COMMITTEE SECRETARY BICKFORD: J.J. Jelincic? 25 COMMITTEE MEMBER JELINCIC: Here.

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COMMITTEE SECRETARY BICKFORD: Ron Lind?
1
             COMMITTEE MEMBER LIND: Here.
 2
 3
             COMMITTEE SECRETARY BICKFORD:
                                            Priya Mathur?
             COMMITTEE MEMBER MATHUR: Good morning.
 4
             COMMITTEE SECRETARY BICKFORD:
 5
                                            Theresa Taylor?
 6
             COMMITTEE MEMBER TAYLOR:
                                       Here.
7
             COMMITTEE SECRETARY BICKFORD: Betty Yee?
8
             COMMITTEE MEMBER YEE: Here.
9
             CHAIRPERSON JONES: Okay. Thank you.
10
             The next item on the agenda is the election of
11
    the Investment Committee Chair and Vice Chair. And for
12
    the Chair, I turn the gavel over to Mr. Slaton.
13
             VICE CHAIRPERSON SLATON: We'll get this down
14
    eventually.
15
             Good morning. So we'll open up the nominations
16
    for Chair of the Investment Committee. And let's see, if
17
    I can get to it, I call on Mr. Lind.
18
             COMMITTEE MEMBER LIND: Thank you. I am pleased
19
    to place into nomination the name of Henry Jones for Chair
20
    of the Investment Committee.
21
             VICE CHAIRPERSON SLATON: Okay. Do we have --
22
   Mr. Lind's been placed into nomination. Any further
2.3
   nominations?
2.4
             COMMITTEE MEMBER MATHUR: Mr. Jones.
25
             VICE CHAIRPERSON SLATON: Mr. Jones. Pardon me.
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1
             (Laughter.)
 2
             VICE CHAIRPERSON SLATON: Okay. To clarify, Mr.
3
    Jones has been nominated as Investment Committee Chair.
             Are there any further nominations?
 4
5
             Are there any further nominations?
             Third and last time, any further nominations?
 6
7
             Seeing none. Nominations are closed.
8
             And since we have no further nominations, a move
9
   by acclamation.
10
             COMMITTEE MEMBER MATHUR: So moved.
11
             VICE CHAIRPERSON SLATON: It's been moved by
   acclamation.
12
13
             COMMITTEE MEMBER LIND: Second.
14
             VICE CHAIRPERSON SLATON: And there's been a
15
    second.
16
             All those in favor, say aye?
17
             (Ayes.)
18
             VICE CHAIRPERSON SLATON: Opposed?
19
             Mr. Jones, you again have been elected as Chair
20
   of the Committee.
21
             (Applause.)
22
             CHAIRPERSON JONES: Thank you. And I just want
23
    to thank my colleagues for another year of support and
24
    confidence of running the Investment Committee.
25
    thank you very much.
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1
             The next item on the agenda is election of the
 2
    Vice Chair of the Investment Committee. And for that, I
3
    call on Ms. Mathur.
             COMMITTEE MEMBER MATHUR: Thank you, Mr. Chair.
 4
5
    It is a great honor to nominate Mr. Slaton for Vice Chair
6
    of the Investment Committee.
7
             CHAIRPERSON JONES: Okay. Mr. Slaton has been
    nominated for Vice Chair of the Investment Committee. Are
8
9
    there any further nominations?
10
             Are there any further nominations?
11
             Are there any further nominations?
             So seeing none, we will entertain a motion to
12
13
   have Mr. Slaton become Vice Chair by acclamation.
14
             COMMITTEE MEMBER MATHUR: So moved.
15
             CHAIRPERSON JONES:
                                 So moved by Ms. Mathur.
16
             COMMITTEE MEMBER YEE:
                                    Second.
17
             CHAIRPERSON JONES: Second by Ms. Yee.
             So Mr. -- all those in favor?
18
19
             (Ayes.)
20
             CHAIRPERSON JONES: So Mr. Slaton, welcome to
21
    another year as Vice Chair of the Investment Committee.
22
             (Applause.)
23
             CHAIRPERSON JONES: Now, we move to the next item
24
    on the agenda, Executive Report, Chief Investment Officer
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25

briefing, Mr. Eliopoulos.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Terrific. Good morning, Mr. Chair and members of the committee. A pleasure to be here to kick-off the February Investment Committee meeting. And it's a particularly full agenda today. In fact, Wylie and I have been packing around two full binders worth of materials. We couldn't fit all of the paper materials into one binder, which is reflective of several very important policy agenda items on the agenda today, as well as our biannual review of the total fund. And that biannual review in itself is full of much data and detailed reports, both from your independent consultants, as well as from your Investment staff.

I think it is an important time to cover up front perhaps a bit of the forest before we spend the rest of the day appropriately on the details, or the trees so to speak. And certainly with the biannual review covering the period ending the end of the calendar year, December 31st, it's probably a good time to reflect a bit on the new round of market volatility that we've experienced to start off this calendar year 2016. It's been quite a start to the year. And if the Committee will remember last year at about this time -- it was actually March, but about this time, we took a little bit of time to reflect on the bigger picture.

And when we did that last year, we looked at what

was then the six-year bull run of the equity markets. And we've included in the biannual trust review the staff report, some updates to that slide. I think the Committee has seen that or will see it shortly.

And what I think important to remember from last year about this time is we looked at the six-year bull run and reflected on the fact that it's not a straight line, and never will be a straight line. And we looked at 19 percent downward corrections, 16 percent, 10 percent, seven percent, five percent. And we revisited some of the causes and the fears during that run of the that time, things like fears of Grexit and China hard landing, and otherwise during the course of 2015.

Well, we can now add the beginning of 2016 to this now seven year bull run. And we now have an 11 percent downturn to add to that list of downturns from the S&P high on May 21st, 2015. And as we said, as I said, last year, this long bull market appears to be moderating. And I think our fiscal year return from last year, which was flat, our calendar year return that we're reviewing today again is flat to slightly negative. And certainly our current fiscal year return to date is now negative.

Last year, we discussed volatility in the context of the anticipation of what the Federal Reserve might do in raising interest rates going into the end of late 2015.

And, of course, that did occur. The Federal Reserve did raise interest rates just this past December. We were hopeful at that time, thinking about this last March, of a return to more normal monetary policy in the United States.

As you will see in our presentation today and the presentation of your consultants as well, but in our staff presentation, our central forecast that the U.S. economy will continue to expand modestly in the coming years, but threats to that thesis are increasing.

The markets, over the course of the past calendar year, are sending warning signals. If we look at the past year, we now have 13 developed countries with negative two year interest rates. Last year, when we talked about this, there were 11. Oil is down over 50 percent.

Inflation expectations have dropped to new lows. During the course of the past year, corporate bond spreads have widened significantly, particularly in the high yield — in the high yield markets.

In addition, as you'll see in some of the slides coming later in the day, approximately one trillion of capital has outflowed from China in the last year.

Turning to the recent pressure on the equity markets the beginning of this year, what has been said is that it can largely be seen as what I would group under

the rubric of global deflation concerns. There's certainly -- the epicenter of this are concerns with growth in the emerging markets, specifically in China, with fears of a hard landing versus a soft landing -- again, a theme we've taken up from time to time over the course of this bull run -- but concerns over the ability or inability of the central government to stimulate the economy in the face of this capital flight.

This renewed fears coming out of Europe, specifically among, you know, the banks or finance sector, facing falling oil prize, the strength of the U.S. dollar, widening bond spreads, all leading to fears of a global slow down.

And, of course, there are renewed fears coming out of Japan. The Bank of Japan moved to negative interest rates recently, in its latest attempt to stimulate the Japanese economy.

Well, what does that -- what does all -- what does that all mean? What is the future and what does our portfolio positioning look like and why?

Well, certainly with the continued moderation of this bull market and the global interest rate environment continuing to muddle along at historic lows, the forward outlook for returns across virtually every asset class is lower than we've experienced in the past, for sure, and you'll hear more from Wilshire in their presentation to you today about their forecast.

Another element impacting CalPERS returns certainly is our global allocation in many asset classes. Not only have many markets underperformed the United States recently, but the strong U.S. dollar has suppressed returns that are earned in foreign currency.

Now, if currency movements are notoriously difficult to predict, especially over the short term, and over the long term tend to equalize, but they've definitely been a factor over the last 12 to 18 months in our portfolio. I think putting all of this together as prudent investors, we have been concerned and should be concerned and are prepared for the possibility of an extended period of lower returns.

In terms of our portfolio positioning, as you are well aware, our plan is strategically weighted towards equity assets and continuing economic growth. Here's the glass is more half full part of the presentation. Not to dwell too much on the risk side, but, you know, continuing modest or moderate economic growth in many parts of the world, most importantly in the United States, remains generally supportive of growth driven assets, and our long-term allocation to equities.

However, we should expect these bouts of

volatility across the stock and bond markets to continue for the foreseeable future.

We, of course, as your Investment staff, are monitoring these developments constantly, and discussing them in terms of our portfolio allocation, our capital allocation, as well as the opportunity to seek opportunities to profit from our long-term investment horizon.

We're also constantly examining the liquidity in our portfolio, particularly in our public asset classes, to ensure we can access that liquidity when and if necessary.

Last, we don't have the option of not being fully invested. That's a familiar phrase that you've heard from us before, nor would we ever recommend that. So consistent with our Investment Beliefs, our long-term investment horizon is both a responsibility and an advantage. And the advantage is that we can hold these volatile assets for the long term in order to profit from the risk premiums that such assets provide.

The responsibility is that in the short term that we make the correct short-term tactical decisions, stick with our convictions when we experience these bouts of volatility, and fundamentally remain patient as the global markets return hopefully to a less dramatic path of

returns going forward.

So, Mr. Chair, we have a very full day in front us, but I thought it would be helpful to provide a bigger picture.

CHAIRPERSON JONES: Okay. Thank you, Mr. Eliopoulos. You mentioned that Japan is moving to negative interest rates, and Ms. Yellen represented the FOMC in her comments to the Banking Committee indicated that she is -- they are considering a similar move to negative interest rates. Could you comment a little bit on how that helps the economy?

I know it's a choice of making a loan, making some money versus being charged for monies on hand. But could you comment on how that drives the economy?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Well, it's very unchartered waters for the world economy. It's a very unusual prescription that central banks are either using now, or in the case of the United States, at least openly admitting to considering. So there isn't a lot of history to look back to predict how this type of policy will affect the financial markets, as well as the monetary system.

So we're in uncharted territory, and it's difficult, if not dangerous, to predict how it might play out. The are definitely commentators that have discussed

the merits of negative interest rates being a tool to stimulate the economy, another form of quantitative easing, if you will, when central banks are perhaps losing some of the more traditional forms -- tools in their toolkit. So that's the hope of the central banks by using this tool.

The risk is what will that mean for the global economy and the monetary system going forward when the banking system has been premised for -- for our history, certainly modern history, on the premise of when you lend someone money, they pay you for that privilege. Turning the looking glass and moving forward to an era where that's not the case is unpredictable. But certainly the premise of it is to try and stimulate the growth, because as you heard from my comments, and what you'll see as well in the materials going forward, concerns about global deflation, growth are the primary risks to the expansion of the economies across the globe and the financial markets.

And the central banks are signaling that they're going to use all the weapons in their arsenal, including the Bank of Japan in this case to try and combat this condition.

CHAIRPERSON JONES: Okay. Thank you.

Mrs. Mathur.

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COMMITTEE MEMBER MATHUR: Thank you, Mr. Chair.

Excuse me.

Thank you, Mr. Eliopoulos, for your thorough and sobering overview of the landscape of the financial markets and the economies globally. I think you quite rightly focus on sort of our long-term horizon. And while we don't love volatility in the markets, we have, over time, been able to withstand that volatility and come out the other side, but I recognize that this is sort of an unusual point in time, and let's see where it takes us.

But given that sort of long-term view, I wanted to turn my attention -- our attention, just for a moment, to this -- the ESG strategy that is currently under development. And thank you for the off-site session, which I think was a good start, a good launching point for the development of this strategy. I know -- and really focusing on these sort of long systemic risks is important to this Committee and this Board.

I know that the next session in our strategy development is going to be in March. I wondering if you could share with us your plans for that session.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Well, the plans for March are to focus on climate change as the priority subject topic under the environmental of the ESG. So March we'll be focusing on climate change, April on

human capital under the S, and G will be coming in May.

COMMITTEE MEMBER MATHUR: And climate change, you're defining currently as just carbon, is that --

CHIEF INVESTMENT OFFICER ELIOPOULOS: Well, I think in developing the agenda materials for March, you'll see we'll look at all of the parameters that we've discussed in the -- really in the past four or five years under the rubric of climate change. But I hear your question, which is you want to make sure that the topic is fully addressed in March. And I think, as you've seen from us in the past, you know, we plan on bringing to the Committee a full review of what we have done and what we propose to do.

COMMITTEE MEMBER MATHUR: So you're going
to -- so your plan is to talk about all the various
strategies that we could employ, including engagement of
some of our policy work, et cetera, in the conversation?

CHIEF INVESTMENT OFFICER ELIOPOULOS: That's
correct.

COMMITTEE MEMBER MATHUR: And are you also planning to consider or to bring to the Committee a discussion of water, which I think is another environmental concern, which could be included under the rubric of climate change. It maybe hasn't traditionally been -- done so, but I think this Committee has expressed

some -- quite a bit of interest in including that in our discussions.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think under the rubric of climate change, certainly water comes up in the standard setting context. So I hear the interest, and we'll try and bring back something in March that reflects that interest.

COMMITTEE MEMBER MATHUR: Okay. Great.

Particularly considering that we have a disproportionate share of our assets in California, which has experienced such a significant drought, and has other climate change water concerns, intrusion, infiltration concerns. It's certainly an issue I'd like to see.

Thank you.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Thank you. CHAIRPERSON JONES: Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Ted, you said that we don't have the option of not being fully invested. Well, clearly, we do have the option. I mean, we could move parts of the portfolio into cash. That would, you know, reduce the risk. It would reduce the expected return. It would raise the employer contribution. It would make the Governor and every editorial writer happy. So I'm not saying that we should, but we at least need to keep in mind that we do have that option. Although, I will also

repeat something that Bob Carlson used to say that our biggest risk is no risk. So I just don't want to shut that off.

One of the problems that I think we have is that we are using monetary policy to try and address a lot of economic issues, and not looking at fiscal policy at all. So I will phrase this as a question. You know, is there any movement out there to start looking at trying to deal with this as fiscal policy -- with fiscal policy as well? And I will also give the option of punting to the economist who's going to be making a presentation later, if you think that's a more appropriate way to get out of the question?

(Laughter.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: No, I do think it would be a good question to pose to the -- to John, our economist, but the biggest -- the biggest forum for discussion on fiscal policy, as well I would add tax policy as well as the Presidential election that is occurring right now, and congressional elections, because, you're right, there's only so much that monetary policy can do. And hopefully government leaders, not just in the U.S., but otherwise, will take up some of these other policy arenas to make change.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Mrs. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

I also wanted to extend my thanks to Ted and your team for the terrific off-site in January, and looking very much forward to the ESG strategic process to come forward.

I wanted to build on what Ms. Mathur just raised, and that is with respect to climate, I think you'll find that there's a lot of momentum just by the institutional investor community generally, particularly post-Paris, and water definitely has been a topic there. So I think resources are starting to really surface in terms of where that expertise will come from.

But as part of the global governance principles review through the Ad Hoc Committee, I know there were a number of issues that were deferred to the strategic review process, and I think water was probably one them as well?

CHIEF INVESTMENT OFFICER ELIOPOULOS: (Nods head.)

COMMITTEE MEMBER YEE: Okay. And -- but I just wanted to encourage you to look to some of the resources that are starting to surface post the UN summit, which I attended, as well as Treasurer Chiang, and CalPERS -- and both CalPERS and CalSTRS definitely recognized as leaders

with respect to our ESG engagement.

So I would love to see water be a part of that.

Obviously, climate generally, but also I think we're going to start to see much more with respect to either demonstrated or developing best practices for how we're going to deal with trying to comply along with the global community on -- to the Paris climate agreement.

 $\label{eq:chief_investment_officer_eliopoulos:} Great.$ Thank you.

COMMITTEE MEMBER YEE: Thank you.

CHAIRPERSON JONES: Thank you.

Okay. Mr. Lind.

COMMITTEE MEMBER LIND: Thank you. I was also following up on Ms. Mathur's and now Ms. Yee's discussion of the ESG strategy. I understand the tremendous amount of work that the Investment Office goes through to present these agenda items, and talk us through it. I mean, there's just a lot of issues there. So I'm assuming that as we go through, not only the E, but the S and the G, the sooner you hear from the Committee about items that we might want to focus on, the better, so you could prepare for that, because, you know, you may have sort of an idea in the IO about what the items are going to be, but maybe some of us have some different ones, for instance, water that was just brought up.

So what would be the best process for letting you know earlier, rather than later, items that we want to deal with?

think -- to be direct about it, I think we have pursued a process now for quite some time to try and identify these topics. And as the Controller rightly pointed out, for instance, water was something that was brought up during the global principles process as well as at our off-site. And at our off-site, what we were trying to accomplish was to identify the timeline for development of a five-year strategic plan, as well as layout at the off-site some of the options/alternatives that CalPERS has considered as well as institutional investors across the globe.

And that was the purpose of the panel that was brought together, as well as a elicit topics of importance from Committee members, which we heard water being one of them, income inequality being another that was discussed, not just at the last off-site, but at other times during the course of our discussion.

In each in-depth review, climate change in March, human capital in April, and governance, the G, in May, we hope to flesh those priorities out more. We think we've heard from the Committee as a whole in these sessions, as well as individually in forums such as this of the

potential topics. We think we've collected those up. And as we said at the off-site, the biggest challenge we have is not identifying the alternatives that we have. It's coming to a strategy that will -- that will focus on the most impactful topics. And I think that's really the hard work of March and April and May is sorting through the identified topics and choosing priorities and strategies to be successful.

So certainly, if there are other -- if there are topics I'd look to the Committee Chair, to Mr. Jones, you know, if there's a process to bring new ideas that have come to the Committee's attention or Committee members' attention, since January, then we're always open to receiving suggestions and ideas. And certainly, we're looking to bring, as we usually do, as we always try to do, you know fulsome agenda items for the Committee.

appreciate you being direct. I like direct. And I -- it's hard to believe there could be anything that's not already out there that you guys heard from us. I guess on the direct issue, you know, my concern is that you -- at the off-site, you had sort of recommended priority focus in the three areas, which some of us maybe think those priorities need to be changed up, or added to, or augmented. And I guess we'll deal with those as each

monthly discussion comes up.

And as you've pretty much indicated, you have a hint on where, you know, the Committee may be going on certain items. And we'll just kind of work through that when the time comes.

Thanks.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Right.

CHAIRPERSON JONES: Okay. Thank you.

Okay. So the -- thank you, Mr. Eliopoulos.

The next item on the agenda is the action consent item. Mr. Jelincic, you want to put your -- okay. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Yeah, on the minutes, in the Section 7a dealing with the private equity policy, I made a motion that failed to make it to the minutes. So I would like to amend the minutes to include that, "Member Jelincic moved that we include language that we will not sign any new limited partnership agreement that does not require the general partner to disclose, as part of the agreement, any and all types of fees, carry, discount, rebates, and other forms of economic rent that the general partner and/or related partners may charge. The motion died for lack of a second". So I'd like to add that to the minutes.

CHAIRPERSON JONES: Okay. I think that's a

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legitimate request, so would you be sure that that's
1
    added -- yeah, Mr. Tollette.
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 3
             CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
 4
             Mr. Chairman, Wylie Tollette, CalPERS staff.
5
    We've also received a number of other small typographical
    edits to the minutes, including in Section 8a. I just
6
7
    wanted to note for the Committee that the final version of
8
    the minutes will include Mr. Jelincic's language, as well
9
    as the corrections to the typographical errors in the
10
    version that made it to the on-line version of the
11
   minutes.
12
             CHAIRPERSON JONES: Okay. So with that, I will
13
    entertain a motion to approve the action consent items.
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             VICE CHAIRPERSON SLATON: Move it.
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             CHAIRPERSON JONES: Moved by Mr. Slaton.
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             COMMITTEE MEMBER TAYLOR:
                                        Second.
17
             CHAIRPERSON JONES: Second by Mrs. Taylor.
             All those in favor?
18
19
             (Ayes.)
20
             CHAIRPERSON JONES:
                                 Opposed?
21
             Seeing none. The items passes.
             Yes, Mr. Jelincic.
22
23
             COMMITTEE MEMBER JELINCIC: Just a question.
24
    The two --
25
             CHAIRPERSON JONES: Put your -- wait a minute.
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COMMITTEE MEMBER JELINCIC: It's -
COMMITTEE MEMBER MATHUR: You just turned him

off.

CHAIRPERSON JONES: Yeah, but he was gone from my screen. So go back.

CHAIRPERSON JONES: Okay. Now, I can.

COMMITTEE MEMBER JELINCIC: Now, I'm on again.

I'm just wondering does the report to the legislature, does that require a specific vote in the statute or is it treating it as a consent item acceptable?

I just want to --

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Oh, in the consent items?

COMMITTEE MEMBER JELINCIC: Yeah.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: You voted on the earlier -- excuse me, you reviewed, as an information item, the other -- the materials that are being sent to the legislature in December.

COMMITTEE MEMBER JELINCIC: Okay. I'm just -I'm not questioning the language. I'm just questioning
does it require a specific vote in the statute? Some of
the reports actually require that, and I just want to make
sure we're staying out of trouble.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I don't believe that's the case. We can confirm that, if

you'd like. We have included it in consent in previous years.

COMMITTEE MEMBER JELINCIC: Okay. I just wanted to make sure that these were addressed.

CHAIRPERSON JONES: Yeah, if you could just verify that for the Committee, that would be helpful, Mr. Wylie.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: We will.

CHAIRPERSON JONES: Okay. Thank you.

Okay. So then that consent action item passes.

The next consent information items. And Mr. Jelincic has requested that 5e be pulled. And it will be returned at the end of the agenda today, 5e.

Moving to item 6a, Mr. Slaton, report of -- on the Global Governance Policy Ad Hoc Subcommittee Report.

VICE CHAIRPERSON SLATON: Thank you, Mr. Chair.

The Global Governance Policy Ad Hoc Committee -Subcommittee met on December 14th, 2015. The Committee -the Subcommittee discussed and approved the fourth reading
of the global governance principles. The proposal to
refer the updated principles to the February 16th, 2016
Investment Committee for first reading, and the decision
to refer the matter of establishing a permanent
subcommittee to the February 16th, 2016 Investment

Committee for further consideration.

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So, therefore, the next Global Governance Policy
Ad Hoc Subcommittee meeting is pending review by the
Investment Committee.

CHAIRPERSON JONES: Okay. Thank you.

The next item on the agenda, 6b, Revision of Global Governance Principles, First Reading. While that's under information consent, we're going to move that to discuss that item after -- at the end of today's agenda. So that will be pulled and moved to the end of the agenda.

Now, we move to Item 7, Revision of Investment Policy for Real Assets, Second Reading.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you, Mr. Chairman. Wylie Tollette, CalPERS staff. This revised policy was presented to the Investment Committee for first reading in December. There have been no changes. There are no significant changes in the risk constraints or limits included in the real assets policy.

So with that, I'm happy to take questions, and would look for a motion to move forward with this policy as provided.

CHAIRPERSON JONES: Thank you.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Yeah. I just -- I've

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1 looked at the consultants letters as well. I just want to kind of point out there's a circular argument going on. 2 3 Last month, we didn't comment on it particularly, because 4 we were told there were no changes, other than 5 concentrating all the things. And then it's recommended 6 by the consultants, because we didn't make any changes. 7 Well, we didn't make any changes, because we weren't 8 making any changes, and just -- it's somewhat of a 9 circular argument.

However, I will nonetheless vote for it.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Just one quick comment, Mr. Jelincic around that.

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you're reading.

The Real Assets Program is currently undergoing a strategic planning effort, and expect to come back to the Investment Committee later in the spring with their completed strategic planning effort. Following that effort, we do expect a policy -- a series of policy changes, and we would come back to the Committee with those policy changes at that time. That's the primary reason there have been so few changes to the policy that

CHAIRPERSON JONES: Mr. Jelincic, you said that you're moving this item.

COMMITTEE MEMBER JELINCIC: I'll move it.

COMMITTEE MEMBER MATHUR: Second.

CHAIRPERSON JONES: Okay. It's been moved by Mr. Jelincic and seconded by Mrs. Mathur.

Mrs. Taylor.

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COMMITTEE MEMBER TAYLOR: I want to thank you for this report, but I also -- I'm -- I don't see anything that I would have any problems with, and I agree we should move this. I just wanted to note, are we -- on real assets, do we take into account carbon footprint when we're investing in real assets. I just -- I wasn't sure if that was part of the policy. I didn't see it. Maybe I missed it.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: We do, and you'll be hearing more about that during the ESG strategic review, as well as when Paul Mouchakkaa brings back the strategic plan for real assets.

COMMITTEE MEMBER TAYLOR: Okay.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

They employ quite an extensive carbon footprinting process, called GreenPrint, and have actually for a number of years, even before many of the other asset classes started that process.

COMMITTEE MEMBER TAYLOR: Awesome. So that's inclusive of when we purchase the larger buildings and -- CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Um-Hmm.

1 COMMITTEE MEMBER TAYLOR: Okay. Great.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

That's right.

COMMITTEE MEMBER TAYLOR: Thank you.

CHAIRPERSON JONES: Mrs. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

I know there's going to be ongoing work still with the staff on the strategic plan, but I was just curious about the consultant's note about as we're trying to truncate some of this, the interpretational risk that may occur with respect to the existing limits and constraints being, you know, brought down into a single table. And I wonder if you could comment on that?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: The overall purpose -- good question, Controller. The overall purpose was to create one policy document that essentially constrains all of the limits and constraints that staff must adhere to. Currently, there's actually two primary governing documents that staff has to keep track of, the delegated authorities, as well as the policy document.

And as a result of that, and as a result of the history of the Real Assets Program, the delegated authorities for real assets are particularly complicated. And I think in order for the delegations to be simplified overall for the Investment Office, we felt it was

important to consol -- do basically a two-step process.

First, consolidate them into one document. So in the current document, they remain fairly complicated and fairly extensive. However, the one advantage is we now have one document to look at. And it mirrors a document that the Real Assets Program actually has been using in practice for some time. They've created kind of their own job aid to help deal with all these complicated limits and constraints.

So step one was to consolidate them, so that now the policy document represents essentially the instructions from the Investment Committee to your Investment staff on what they're allowed to do and how much they're allowed to do it.

During the strategic planning process, that I mentioned a moment ago, we're looking at all of those limits and constraints and working to try to simplify them. We definitely do not want to, you know, add more authority where we don't feel it's necessary or required to get the job done. We definitely just want to make them a little less complicated to navigate.

You can see in the Attachment D that's now included, there's just a lot of detail. But the overall purpose isn't necessarily to generate or provide staff more authority, it's just to make the overall policies and

constraints more understandable.

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COMMITTEE MEMBER YEE: Okay. Thank you.

CHAIRPERSON JONES: Yeah. Thank you very much for that. And it kind of goes to my question also, because in the PCA consultant opinion, they did indicate that Attachment D was problematic. And I would like to ask PCA do they have any alternative suggestions of how do we achieve the same goal?

MS. FIELDS: Good morning, Christy Fields, PCA.

I think this is a really important thing to be doing right now. The alternatives would be more around timing of the changes to perhaps coincide with the rewrite of the strategic plan, and then the policy edits at that point.

But I think the overall goal of moving towards a more consistent presentation of the limits and constraints kind of overrode that. So that was what we were trying to acknowledge in the letter.

CHAIRPERSON JONES: Okay. Thank you.

Just a minute.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Christy, when you reviewed this, you didn't see any contradictions in Attachment D to what currently exists, did you?

MS. FIELDS: No. There were no -- no

25 contradictions. It's just as you're aware how complicated

that delegated authority has been to date, and just trying to capture that in a single table is just challenging. It does -- there's no obvious conflicts, but that's what the challenge is.

COMMITTEE MEMBER JELINCIC: Okay. Thank you.

MS. FIELDS: Yeah.

CHAIRPERSON JONES: Thank you very much.

Okay. That was an action item, so it has been moved and second.

So all those in favor?

11 (Ayes.)

12 CHAIRPERSON JONES: Opposed?

Seeing none.

The item passes.

We go now to the CalPERS Trust Level Review, the Consultant Report. We have from Wilshire Associates, Pension Consulting Alliance, and StepStone Group, so I guess in that order.

(Thereupon an overhead presentation was presented as follows.)

MR. JUNKIN: Good morning. Andrew Junkin with Wilshire. I have with me today Rose Dean, who will be helping me discuss the performance. And since Ted has covered a lot of what has gone on since January 1, which is kind of the lead story, I think, rather than what

happened last year, albeit, what happened last year is important, we're not going to spend a lot of time digging into the details of last year.

If you'll turn with me perfect to Attachment 1, page two --

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MR. JUNKIN: -- you can see Wilshire's update. And we update these asset class assumptions quarterly. These are our 10-year forward-looking assumptions. We also have a set of 30-year assumptions. Thank you. I forgot I had to drive.

(Laughter.)

MR. JUNKIN: And you can see it's a pretty sanguine look at expected returns going forward. Private markets, which is really our nomenclature for all private equity investments coming in below 10 percent is pretty significant. Equities below seven percent, fixed income in the threes or fours, depending on where you're looking.

Now, a lot of the market obviously has become sort of dislocated since this point. If we were to rerun this, I think you might see some movement up. But we don't rerun this on a daily basis, because that's a pretty tough way to manage nearly \$300 billion.

So, you know, the question that we get, after I present this slide, is how do we get to our long-term

expected returns? And I think the answer is by weathering the storm, trying to be opportunistic when opportunities do arise in the short term. And we'll talk about some of those seemingly present opportunities at the moment, but also recognize this is 10 years, and you're in business for a much longer period of time than that.

Our longer term assumptions -- if you could just close your eyes for 30 years, those assumptions are about half a percent, three-quarters of a percent higher on a portfolio basis. So it gets a lot closer.

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CHAIRPERSON JONES: Before you go, Andrew, Mr. Jelincic had a question on that page.

COMMITTEE MEMBER JELINCIC: On this particular page. The private markets, I assume that's both real estate and private equity?

MR. JUNKIN: It is just private equity.

COMMITTEE MEMBER JELINCIC: It's just private equity.

MR. JUNKIN: It's a blend of buyouts, venture capital, growth equity, and distressed.

COMMITTEE MEMBER JELINCIC: And is it weighted similar to our portfolio?

MR. JUNKIN: It is completely dominated by buyouts. So in that way, it's similar. It has greater

exposure to venture capital than you could really ever hope to, just because of your size, but I would say it's largely the same.

COMMITTEE MEMBER JELINCIC: Okay. And then -- so if the private markets are strictly private equity, does that mean that we're looking at a IRR there?

MR. JUNKIN: Well, no, this is -- this is still a time-weighted return, because that's what we have to use in our asset allocation process, and that's what these drive.

COMMITTEE MEMBER JELINCIC: Okay. And then the other question is can you explain the difference between the expected compound return and the expected arithmetic return.

(Laughter.)

MR. JUNKIN: My least favorite question of all time. The compound return really is the one that you should focus on. That's the one that will drive to the 10-year compounding of wealth. The arithmetic return is a single year number, and it accounts for the volatility. There's a formula that links the two, which someone smarter than me could probably recall off the top of their heads. But the higher the volatility, the bigger the gap between the compound return and the arithmetic return.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Okay. Mrs. Hollinger.

COMMITTEE MEMBER HOLLINGER: Thank you. Thank you for the report.

The Investment Committee, I believe John Cole did a great job in showing that with this period of increased volatility, if you look historically at being a long-term investor, you're assuming you're cash flow neutral. So I was just wondering your thoughts on us -- on the view of long-termism when we're no longer cash flow neutral?

MR. JUNKIN: It is a game changer.

COMMITTEE MEMBER HOLLINGER: Right.

MR. JUNKIN: And the path of returns becomes significantly more important when you're cash flow negative, and you are in the rate at which you are negative will continue to grow over time.

So you have to be much more cognizant of drawdowns like we've experienced over the past couple of months, and try to -- my opinion is to try to build in mechanisms that prevent the magnitude of the drawdowns, or in the case of your liquidity policy, provide for some ability to fund benefit payments, capital calls without being forced to sell assets at low prices, because once you do that, those don't get a chance to recover.

So I think the portfolio priorities project, the benchmark project all leading to the next asset allocation

will ultimately get to some of these issues. But you're exactly right, I mean, what you need to focus on is how much money do we have, not what is the percentage return, because you've got to write checks for dollars and cents, which are tied to the percentage return. But again, the order of those returns matters a great deal in terms of how much wealth that you have. So I don't know if I actually answered your question.

COMMITTEE MEMBER HOLLINGER: Yes, what -- oh, I just want to make sure that we're not cushioning ourselves by our long-term thinking of the past, and recognizing that we may have to do things differently going forward.

MR. JUNKIN: I think that's a great point. And one of the agenda items later is to talk about the borrowed liquidity process, which I think is, in many ways, a protection against the drawdown risk that you and other investors face.

COMMITTEE MEMBER HOLLINGER: Okay. Thank you. CHAIRPERSON JONES: Okay.

MR. JUNKIN: Okay. Page three here, a quick snapshot of the economic review. I'm not going to spend a lot of time on this, other than to say the unemployment rate now is 4.9 percent. We continue to add jobs. We are actually out now. If we were to update this chart in the lower right now, there would be no negative bars, so no

monthly job losses for the last six years. It's a pretty staggering number.

Now, I can't say every single one of those months was an enormous job gain, nor were the quality of jobs gained in every single month fantastic, but the fact that we've come back from more than 10 percent unemployment to where we are now is pretty staggering.

I would argue, just to sort of build off of some of the comments from Ted this morning, that what we've seen in the last month really is less about the economy and more about the markets. I think you could make the argument that we're seeing a profits recession, but not necessarily an economic recession at this point. It could spill over.

Going from low or zero interest rates to negative is going to have unknowable consequences going forward. I think if that had happened 40 years ago, we all would have just taken our money out of the banks and kept it in coffee cans. But I don't know about you, my bills get paid out of that account. I don't -- I mean, I don't -- I carry one check with me. So I don't know how to get money out of the bank, quite honestly.

So I think, you know, when we -- when look at -- now, listen, the amount of money that I have in my checking account is not enough to move global markets.

Let's be certain about that. But, you know, there's a convenience that we've now all adopted that isn't going to make capital flee from banks immediately, but at some point, we'll reach a threshold of pain where things will change dramatically for the banking markets.

A staggering number to me, and I had to look at this twice, European bank performance, the equity performance, this year is worse than 2008. I mean, that's an enormous figure to contemplate, given that we're six weeks into the year.

It is creating some opportunities. You look at the high yield market. The high yield market right now has a yield above 10 percent. I'm not sure you want to own some of the names that are pushing that yield higher, because they're probably going to default. We haven't really seen the default start yet.

But you've got spreads north of 200. We had interest rates -- 10-year interest rates in the U.S. at 2.20 at the beginning of the year, and they're close to 1.70 now, and hit something with 1.5 last week in a brief moment of panic. Now, you know, I layout all of these comments, and intuitively I think, well, the dollar must have -- it must have strengthened during this period of time, and it hasn't. And it doesn't really make much sense.

And I think, and I'll give credit where credit is due, to Allan Emkin, the only explanation that makes any sense to me right now is the world doesn't want to take U.S. political risk. Our political silly season is upon us. And, you know, the outcome could be significantly different now versus 11 months ago.

You know, just -- here's another -- another comment on how dislocated the market seemed to have gotten. The Hong Kong Stock Market is trading at a price to book of 1. Right, that was the exact look that I had, how does that happen? You know, we're discounting future earnings at zero value. You can buy the companies and their future earnings for the price of the assets.

That's a great deal.

All right. So I'll move on. I think as Rose gets to some of the performance -- and I'll jump ahead to the -- I'm just going to blow through all of this.

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MR. JUNKIN: Let's stop here, page eight. Using those expected return forecasts that we just showed and your target and actual allocations -- let's really just focus on the target, we're forecasting a 10-year return of about 6.65, volatility of about 12.5. The longer term return, using our 30-year assumptions, would be closer to probably seven and a quarter.

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MR. JUNKIN: The risk, no surprise, and as Ted mentioned earlier, 85 percent of that comes from growth assets, public and private equities. The rest of the portfolio is there, essentially to help that part of the portfolio weather the storm.

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MR. JUNKIN: And let's go to total fund performance here on page 11. As Ted mentioned, the one-year return for the total fund is essentially flat. It outperformed the policy benchmark over the longer term time periods there, 3, 5, 10 years. Positive returns, the 10-year return behind the benchmark. Everything else either a little bit ahead or right in line with.

Rose is going to cover more specifically the performance of the asset classes. But the one that's going to jump off the page at you is inflation. This is not a year where inflation protection assets did well, because the view of inflation sort of systematically around the globe has come way down. And our forecast for the next 10 years is about a percent and a half. That's not a very high rate of inflation, and it's certainly below, I think, the targets of most of the central banks around the globe.

Are there some opportunities there? Probably so,

but it's still going to be a bumpy right, and I think a lot of it's going to be driven by oil prices at this point, you know. I'm not willing to make a call on oil prices, but some of the assets that are entwined in the process of extracting oil and getting it to market in various and sundry reforms, those have value. And a lot of that has been kind of washed away by just what's happened to the prices.

But those processes will continue. Those -- you know, the machines that are built to refine oil, that still has to stay in place.

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MR. JUNKIN: I've got one more page, and then we'll -- I'll hand it off to Rose. This is the calendar year attribution. So if you want to see what drove the returns, I'm just going to focus on the far right box here, total fund return contribution. You can see the total allocation by asset class, what was driving the returns and that sums to the monthly linked return of minus 0.22. So if you were just 100 percent in index funds across all of your asset classes, you can't be, because of some of the private assets classes, this is the return you would have gotten.

Active management actually pushed returns a bit higher, and you can see led, in large part, by private

equity. So I'm going to stop there and hand it off to Rose to --

CHAIRPERSON JONES: Okay. Before we move forward, we have a couple of questions. Maybe this is a good time to -- Mr. Lind.

COMMITTEE MEMBER LIND: Thank you. You mentioned oil. And, you know, the average Joe, or I'd even say in this case, the average Ron, thinks lower prices are a good thing, right?

MR. JUNKIN: Yep.

COMMITTEE MEMBER LIND: It creates lower gas prices, but I understand what it's done to the global markets. But how long does this go on before it creates opportunities in the transportation sector? And then as the cost of goods comes down and consumers can afford to buy other goods and so -- and create higher consumer demand, when does that start to happen?

MR. JUNKIN: I think that's the exact issue of are we in sort of a profits recession or a consumer-led recession? And right now, it's definitely not consumer led. But the fear, the anxiety that consumers feel, it probably has not translated to higher consumer spending, just because of the de facto tax decrease that's happened. The gas station near my house had gas, regular unleaded, for below a \$1.40. You know, California is very

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    different, but --
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             (Laughter.)
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             MR. JUNKIN:
                         Come to Colorado, fill up your car.
             (Laughter.)
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             MR. JUNKIN:
                         There's some other things you can do
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    in Colorado, which we won't talk about.
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             (Laughter.)
             MR. JUNKIN: But, you know, people are not
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    spending that yet. I think some of that came through in
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    the retail season in December. But I think that, you
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    know, 2008 still lingers in a lot of people's memories,
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    and they're not going to spend a 100, or 101 or 102
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   percent of their income, at this point, when there's some
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    cost reduction. Probably some of that hits the bank.
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             COMMITTEE MEMBER LIND: Well, airlines, I guess
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    they buy their fuel quite a ways in advance, and maybe it
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    hasn't gone through the system yet, and other similar
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    factors, right?
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             MR. JUNKIN: Yeah, I think that's right.
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    Although, to tell you, from the amount I travel, air fare
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    is down pretty significantly.
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             CHAIRPERSON JONES: Okay. Mrs. Taylor.
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             COMMITTEE MEMBER TAYLOR: So I just -- I needed
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   you to repeat something for me. The downward pressure on
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    the dollar is because of?
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             MR. JUNKIN: Well, the only explanation I've
    heard that makes may sense is people don't want to take
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    the U.S. political risk.
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             COMMITTEE MEMBER TAYLOR: Right now --
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             MR. JUNKIN: Right now.
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             COMMITTEE MEMBER TAYLOR: -- because of the
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   political season.
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             MR. JUNKIN: Yeah, because we don't know who -- I
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   mean --
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             COMMITTEE MEMBER TAYLOR: Right.
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             MR. JUNKIN: -- think about not -- I'm not trying
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    to make a political statement, but some of the statements
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    that some of the would-be Presidents are making, are
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   probably not globally well received.
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             (Laughter.)
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             COMMITTEE MEMBER TAYLOR: Gotcha
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             MR. JUNKIN: Is that -- did I tip-toe through
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    that --
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             COMMITTEE MEMBER TAYLOR: You tip-toed very well
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    through that.
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             (Laughter.)
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             COMMITTEE MEMBER TAYLOR: So I just -- because
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   part of your report said that the dollar was still very
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    strong. So that's where I was --
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             MR. JUNKIN: Through last year, it was.
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COMMITTEE MEMBER TAYLOR: Okay. So now --

MR. JUNKIN: -- and I would have expected that to continue based on just the market events, the changes in rates around the globe, the equity market volatility.

People tend to flee to the dollar when that happens -- when all of those happen, and yet the dollar is weak.

COMMITTEE MEMBER TAYLOR: Ten years, that's not occurring right now.

MR. JUNKIN: Exactly.

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COMMITTEE MEMBER TAYLOR: So -- and then I also wanted to comment on the wage growth being modest, and then piggyback on what Ron was talking about in terms of the spending that we should be doing because of lower oil prices. I'm wondering if we are not taking into account that the wage growth is pretty -- yeah, I mean, it's non-existent. What we are seeing is while the jobs are there, we're having 4.9 percent unemployment rate. We're looking at lower wage jobs. So I think that puts the pressure on us as well. And I'm not seeing where that was addressed here.

MR. JUNKIN: I think that's right. And on page six, we've got conveniently a slide titled wage growth modest --

COMMITTEE MEMBER TAYLOR: Report no -- yeah.

MR. JUNKIN: Yeah, the bottom chart there is

pretty staggering that 15 percent roughly of the workforce has pretty repeatedly reported no increase in wage.

COMMITTEE MEMBER TAYLOR: Right.

MR. JUNKIN: And that's a -- that's a much higher number than what we saw for most of the nineties and early 2000s, where it was about 10.

COMMITTEE MEMBER TAYLOR: Right, right. And I think it's very consistent --

MR. JUNKIN: So I think it goes right to your point.

either being driven down or they're staying the same. And I think that has a huge impact. And I'm wondering, I think J.J. talked earlier about fiscal policy, rather than monetary policy. And I'm wondering if somehow or another, we, as an institution, start looking at pressuring fiscal policy as well to drive those wages up, and part of our social -- our human capital, you know.

MR. JUNKIN: I think we've run out of slack in the labor market. I think if -- to the extent job growth continues, there has to be positive pressure on wages coming forward. We've seen -- in fact, we've seen manufacturing coming back to the U.S., because we've -- because of the dollar, we've become much more competitive.

I just -- I don't know how low unemployment can

go before there really is some pressure building in the system for that. Now $\ensuremath{\mathsf{--}}$

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COMMITTEE MEMBER TAYLOR: Now, are those numbers even accurate, when we're looking at this, because unemployment doesn't take into account the underemployed.

MR. JUNKIN: That's right. There is a different version of the unemployment number that does. We're reporting the headline number.

COMMITTEE MEMBER TAYLOR: The U-6?

MR. JUNKIN: But, yeah, the U-12, I think has the higher number. It's come down some. It's still pretty high stubbornly so. But again, I think once, you know, the slack comes out of U-6, you start chipping away at U-12.

Now, you know, the other part is just labor force participation, which is still pretty low. And so you may have to go through U-6 and U-12, and then get into labor force participation increasing that through higher wages, before we really kind of start to feel wage pressure.

COMMITTEE MEMBER TAYLOR: Right, right. Okay. Thank you.

MR. JUNKIN: You're welcome.

CHAIRPERSON JONES: Okay. You can proceed.

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MS. DEAN: Good morning, Rose Dean, Wilshire

Associates.

So if we can turn to page 17, we'll get started with the U.S. equity market review. The third quarter was rather rough with markets were down about seven percent.

U.S. equities recovered most of the losses in the fourth quarter, and Wilshire 5000 returned 6.4 percent. And this helped put the 2015 number back on the positive side with 0.7 percent at the end of the year.

The sector returns on the upper right-hand side shows that the sector returns were mostly positive, with the exception, in the fourth quarter, of the energy sector. And, in fact, the energy sector was down more than 22 percent for the year.

The bottom two graphs show the equity characteristic returns, where you can see that the large cap stocks continue to outperform small cap stocks, and growth stocks trailed value stocks once again. So I'm just going to skip to slide 20 --

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MS. DEAN: -- and look at the performance of the public equity portfolio. For the fourth quarter, the public equity portion returned about five percent, and the one-year number stands at negative 2.3 percent, just slightly below the policy benchmark. And the market value stood at 154.7 billion at the end of year.

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MS. DEAN: Turning to the private equity side on slide -- page 27. The top graph shows that the fund raising activity remained robust in 2015 at about 288 billion. This was just below the 2014 number of 340 billion.

In terms of the valuations, the valuation -- the deal value actually reached about 411 billion in 2015, and this was an 18 percent increase from the 2014 levels.

However, as the line graph -- as the line on the graph shows, the deal count actually decreased about five percent in 2015.

So the valuation was up by 18 percent, largely due to some mega deals that happened in 2015. And, in fact, there was one deal that was the highest value private equity backed buyout deal on record at \$67 billion. And that was the acquisition of EMC.

COMMITTEE MEMBER JELINCIC: I'm sorry, what was the acquisition?

MS. DEAN: EMC acquisition, \$67 billion deal.

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MS. DEAN: On slide 28 -- there we go -- in terms of purchase price multiples, we pierced the 10 times EBITDA level for the U.S. in 2015, while the European prices have come down slightly in 2015, but we're still

maintaining levels that are similar to the pre-crisis level.

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MS. DEAN: If you look at deal activity in the U.S. by size, actually almost 50 percent of the deals by deal count were in the smaller deals under 25 million. But if you look at deal activity in dollar terms, more than 20 percent was actually driven by mega deals that were bigger than two and a half billion dollars.

And I'll just make a quick note of the capital overhang on the next slide.

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MS. DEAN: We stand here at about 500 -- close to 540 billion in overhang. So this still remains an issue in the PE sector. And this overhang is close to the highs of pre-crisis level, and it's dominated by the last three vintages, 2014, '13 and '12.

MR. JUNKIN: This is I think one of the things that really drives our less robust forecast for private equity. I mean, it's not baked into the model, but when you compare our model with the capital overhang, it kind of all comes together. And you think with this much dry powder, you know, you're unlikely to see a deal go at six or seven times. They're going to stay kind of near the market, and it's not likely that you're going to see

really amazing opportunities fly by, unless we get into a really distressed market.

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MS. DEAN: So on page 33, we can see that the private equity program returned five and a half percent for the year, nicely outperforming the benchmark, and for the three-year, the return was 12.9 percent.

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MS. DEAN: So I'd like to turn to the U.S. fixed income market now on page 36. So in December, we saw the first rate hike by the Fed after the financial crisis of 2008, but it had little impact on the treasury markets. You can see that the yield curve shifted up slightly compared to a year ago. But really, the impact was on the bond spreads, as mentioned before by Ted, and high yield really took the brunt of the widening.

This is partially due to obviously the concerns of our higher funding costs and a rising rate environment, but really related to the concerns of the energy related names in the sector and the potential default that may yet to come.

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MS. DEAN: So I'll move along to the performance of income program on page 40. So for the quarter, we -- the income program was -- returned negative one percent,

and for the year it was down 1.4 percent, but slightly outperformed the policy benchmark, and we're still outperforming the benchmark for the longer term, five- and 10-year period.

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MS. DEAN: Moving along to real assets on page 47. Here, I'll just make a quick comment about the impact of the collapse of the commodity prices in 2015 returns. As you can see, the Bloomberg Commodity Index return was down about 25 percent, and the MLP sector lost more than 32 percent in the year.

And as Andrew mentioned, as interesting -- providing interesting opportunities for investors going into 2016 at these valuations.

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MS. DEAN: The inflation program returned negative 4.7 percent. It was a rough year, down 11.3 percent, but still outperformed the benchmark by 70 basis points for the year.

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MS. DEAN: I'll just make a quick comment about the private real estate sector here. The fund-raising activity was solid in 2015 at about 107 billion, slightly below the 2014 levels. And the activity was largely focused in North America. And Europe really, the activity

was centered around a few major cities in the UK and a handful of cities in continental Europe.

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MS. DEAN: On the next slide, these graphs are just meant to really drive home the point that the fundamentals in the commercial real estate market remained solid. Vacancy rates are continuing to come down. And if you look at the apartment sector, the vacancy rate is near the recent history lows.

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MS. DEAN: And with that, I would turn to slide 55 for the real assets program returns. We returned 14 percent in real assets for 2015, and that was an outperformance of 140 basis points for the year. And just lastly, the affiliate portfolio performance was largely in line or slightly above the respective benchmarks for the year.

And with that, if there are any questions, we'd be happy to take them.

CHAIRPERSON JONES: Okay. I see no questions. So does that conclude Wilshire's part? So now we --

MR. JUNKIN: It does.

CHAIRPERSON JONES: Okay. We move to PCA.

MR. MOY: I'm Mike Moy from PCA.

Andrew Bratt is going to go over the performance

and then I'm going to deal with the current environment for private equity.

Andrew.

(Thereupon an overhead presentation was presented as follows.)

MR. BRATT: Good morning. Andrew Bratt, PCA.

Your private equity program performed -generated positive returns over all time periods, but
performance did decline during the second half of 2015.

It was a broad decline, not limited to any individual
strategy, geography, investment structure, general
partner, or any particular sector of the economy, though
certain -- certain of each were affected
disproportionately.

The program has -- as Wilshire mentioned, the program did outperform your policy benchmark over the one-and three-year time periods, while underperforming the longer five- and 10-year periods. We say this during each reporting period, and we'll say it again with a public market linked benchmark. We continue to expect that private equity will underperform rising public markets, such as was the case in the aftermath of the financial crisis during the bull market. And private equity will outperform falling public markets, as was the case during the current reporting period.

Your program has outperformed the peer based State Street Private Equity Index over the three-, five-, and 10-year periods, but did underperform the one year period. Your program is cash flow positive and has been so since 2011. During that time period, it's generated 23 billion of positive cash flow.

And going forward, your program still is largely dominated on the strategy side by buyouts in the -- with respect to structure, it is by partnerships. And also on the geographic side, your portfolio has a bias towards United States based managers.

Mike.

MR. MOY: On the current environment for private equity, there's been a tremendous amount of -- excuse me, been a tremendous amount of noise about fees, carried interest, and other items in terms of governance as how private equity is managing itself.

ILPA came out with its revised template, which has been a long awaited, let's call it, vehicle for reporting of those issues, which have not historically been reported.

The arrival of that template is the first step in what is a multi-step process. The limited partners who are members of ILPA have all approved the new template. The general partners have been basically silent. The

requests that have gone out to general partners to complete information required by this new template has resulted in a rather mixed response.

The complexity that it causes is that there will be GPs who are not responding and not responding positively. As the template's exposure gains maturity, we expect to see more and more compliance, but that's going to take some time.

Our belief is that CalPERS will be able to derive the information sometime this year, probably with the issuance of the annual report as of June 30. But let's call it internationally -- or across the private equity spectrum, whether that's going to be done by all investors or not is unknown. My guess is the larger public plans will be attempting to produce similar information, so you'll be able to get some comparative data.

The decline in the public market since January
1st has produced the arrival of a denominator impact,
which was something that was an issue for private equity
going back to the crisis, where the total asset numbers
diminished and your percentage of assets continued to
remain the same from an allocation perspective.

So at December 31 you're underallocated vis-à-vis the interim target, but if you did that calculation today, you'll be -- you'd be over-allocated because of the

decline in the numerator.

The issue of what the impact of the public market volatility is going to be on private equity is something that is a topic for conversation without any real, let's call it, certainty as to what the answer is going to be.

GPs have been getting a fair amount of publicity, in that those that are public, the prices for their securities have diminished dramatically. And the wonder is how are they going to respond to that?

This goes back to the original issue that was on the table when GPs started going public. It created a question of whether their interest in being public was going to exceed their interest in performance, which their private fundraising and private performance have been governed by.

We don't have a good answer for that question right now. I think it's probably among the first occasions where we will get a chance to really observe how the GPs react to the public market sell-off of investments in the general partner.

And then the last goes back to the question of dry powder, which Wilshire addressed. The number is enormous, but it has remained relatively large for a long period of time, and we have witnessed discipline for the most part among managers. I'm not sure that that

discipline can be continued, but we will be watching it very closely.

Be happy to answer any questions.

CHAIRPERSON JONES: Okay. Yes, we have a few questions.

Mr. Moore.

ACTING COMMITTEE MEMBER MOORE: Hi, Mike. How convinced are you that the GPs will use the ILPA template going forward, and what can we do as a Board to encourage its use?

MR. MOY: I guess to the first part of the question, your GPs to the extent that you have a continuing relationship with them, I feel highly confident you'll get 100 percent cooperation. To the extent you done get some cooperation, it's going to be driven probably by the fact that they're no longer going to be in your portfolio. So that will result in some sort of estimation process, because without the information, you'll have to come up with some reasonable way of dealing with it.

As it relates -- I'm forgetting the other part of the question.

ACTING COMMITTEE MEMBER MOORE: What can we do as a Board to encourage its use?

MR. MOY: That's a question I really don't have a

great answer for. And the reason I don't is I think the limited partner community has got to get cohesive with respect to how it deals with general partners. And it's been relatively fractured. The larger investors have much more leverage than the smaller investors. And many of the larger investors pursue an agenda, which some smaller investors don't necessarily accept or don't favor.

The larger investors will be able to be more convincing in discussions with the general partners. And as a result, I think you'll see a fair amount of, let's call it, conformity among -- because they're going to be the larger GPs typically.

The -- if you look at ILPA and what it stands for, and how it's structured, you run into sort of a fundamental flaw in the way it's been set up. That flaw is, even though it's called limited partner association, it relies substantially on fees that are generated from general partners. So its financing for ILPA comes from general partners.

And that flaw, in my view, is something that's fundamental and should be changed, because it would send a very distinct message from limited partners to the general partner. That's a huge hurdle to try and overcome.

ACTING COMMITTEE MEMBER MOORE: Thank you for your candor. I appreciate it.

CHAIRPERSON JONES: Mr. Costigan.

COMMITTEE MEMBER COSTIGAN: Thank you, Mr. Jones. Very interesting presentation. So I'm going to ask a fairly simplistic questions, because I don't understand this all the time. And I spoke last week at a conference and one of the issues that did come up was on private equity. So here's what I struggle with. I understand we're in -- we use private equity to hit the benchmarks, because -- the argument is that the returns are going to be higher.

What I struggle with is we had a great presentation about where the public equities markets have been. Okay. We see the market is down 15, 20 percent, where we see Hong Kong at a value of 1. How do you look at or evaluate private equity? I mean, you take the 2 and the 20, you take the fees off. We're looking at people to tell us the value in order to put it back into the total value of the fund.

Where -- I struggle. If I look at G.E., or IBM, or a large tech company and I see their stock is diving, why is there not a corresponding devaluation in the private equity market? How do I know?

And I know that's a very simplistic question, but I can go on and I can look at my stock portfolio right now and I know exactly what's going on, but I can't look at

private equity. And why is the assumption that private equity is not suffering internally the same way that the public equities are.

MR. MOY: Private equity suffers, but not to the extent or with the same timing as the public markets.

COMMITTEE MEMBER COSTIGAN: Correct.

MR. MOY: And the reason for that is the selection methods that general partners use in identifying opportunities. They tend to be very, let's call them, micro-focused in terms of what they expect to be able to achieve with a particular company. They do not -- they don't have momentum in their nature. Sometimes they will all go to energy, because they see a big opportunity set.

COMMITTEE MEMBER COSTIGAN: Let me just give you two -- just help me understand. Okay. So let's take a grocery store. So Albertsons is owned through private equity, okay, and then you have a publicly traded grocery store. You have Dell that is private equity and then you have HP. Why do they not move correspondingly if they're in the same markets?

MR. MOY: I'm guessing if you did plot it with a time lag, because of the reporting nature for private equity, there would be a correlation. It may not be one for one, but it would be pretty close.

COMMITTEE MEMBER COSTIGAN: But how do we

track -- how do -- I guess the question is, as we're struggling with all of this, or at least I am, how do we know the true value at the same time or is there always going to be a lag in private equity?

MR. MOY: There's always going to be a lag. And what's reported is typically driven by the underlying, let's call them, fundamentals that support the public markets. So when they do the valuations, they look at what comparable companies are earning in terms of price earnings, et cetera. And they apply those metrics to the results for a portfolio company and arrive at a valuation, but that's time lagged. So you're going to have a 90 to 180 day time lag.

COMMITTEE MEMBER COSTIGAN: So -- and just a couple more questions, Mr. Jones.

CHAIRPERSON JONES: Sure.

COMMITTEE MEMBER COSTIGAN: So the assumption that I should make, and please correct me, Mr. Eliopoulos, if I'm wrong, is if we've seen a 20 percent decline in various portions of the portfolio, the assumption is we're going to see private equity 90 to 120 days from now have that same decline in valuation?

MR. MOY: I believe your experience during the 2007/2008 crisis would suggest you will see a similar decline, but not at the same rate.

COMMITTEE MEMBER COSTIGAN: Okay. I'll have more questions.

Thank you, Mr. Jones.

CHAIRPERSON JONES: Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: To follow up on Richard, and then I've got some other points, private equity valuations are somewhat artificially smoothed. And so that's really part of the reason why you don't see -- you see underperformance in rising markets, and outperformance in declining. Part of it is it's the GP deciding what this thing is worth rather than investors.

But, Richard, one of the sources that's out there is Fidelity has a fairly large fidelity that's heavily invested in private equity. And they actually mark their portfolio to market once a month. And you see many of the valuations are very similar to the public market, and they've got -- you know, the GP doesn't have to deal with the SEC evaluating it. The Fidelity, because it's a public fund, does. So I think that's a source where you can see it.

On slide 6 of 17, which is our strategy allocation, it is what it is, but I would like your opinion as to whether it is what it ought to be, and if not, why not, and if so, why?

MR. MOY: I would say it is what it ought to be.

And the reason I would say that is your size dictates your strategy more than it would if you were a smaller investor. Your inability to access certain managers because of their size, and the complexity of managing multiple relationships drives you towards the buyout space, and buyout related space.

And that is just a function of complexity.

You're trying to keep it as simple as possible and deploy as much money as possible and as spaced it's producing an expected rate of return that's in excess of what your overall benchmark is. And that -- that's driving the equation.

COMMITTEE MEMBER JELINCIC: And I -- you know, I've expressed my concern about buyout, because I think it does a lot of negative things to the economy. But there was a recent study that actually was looking to get to what the real fees were in private equity. And it came to results that we were fairly predictable and there's a general consensus evolving around what they are.

But there were a couple of very interesting little side notes in the data. It didn't deal directly with fees, but it -- I was wondering if you could comment on them. One was that the publicly traded GPs tended to have higher portfolio management fees than non-publicly traded GPs. Any insight into why that might be?

MR. MOY: The publicly traded GPs for the most part they have specialties in buyout or distressed. The non-publicly traded tend to be in other sectors where management fees would tend to be lower. That's the only conclusion I could come to.

COMMITTEE MEMBER JELINCIC: And one of the other things that was in there that was really striking to me is that, you know, the LBO space, you tend to buy companies with good cash flows, so they can pay the debt, which is why you can LBO them. And yet, they had between 15 and 17 percent bankruptcy. And the other thing that was really kind of interesting in it is that earnings before taxes tended to go down in the LBO space. Any insights into what's driving that?

MR. MOY: I would say the answer to that question really is an episodic one. It would depend on the circumstances. There's a relatively high motivation for tax avoidance and tax efficiency among investors, so that they would be structuring transactions in a way that they would optimize their tax position, which would result in a lower tax rate.

COMMITTEE MEMBER JELINCIC: Okay. And then on 7 of 17, the last bullet, you talked about buyout strategy, providing attractive returns. How much of that is driven by the increased risk in LBO space, and how do we deal

with the fact that there's more and more academic work
that says that you can replicate those same kind of
returns for far less fees by dealing with small leveraged
indexes?

MR. MOY: As to the first part, the attribution analysis is something that we are hoping to be able to do when the PEARS system becomes fully functional. So that's something that would be coming in the future.

As it relates to -- I'm forgetting the second part of your question, J.J.

COMMITTEE MEMBER JELINCIC: The fact that these results could be replicated.

MR. MOY: That's an order of magnitude question, because the comparable data that's being used is in the small cap space. And that's not where many of the transactions that you are involved in as a limited partner, where it's being done for deploying large amounts of capital. And it's also being totally done on a retrospective basis. They're looking backward as opposed to looking forward.

So I've seen the studies. I've looked at them.

And I think the difficulties of being able to deploy the amounts of capital that the larger investors would have to deploy make it virtually impossible to replicate that.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Okay. There's no further questions on that item.

MR. MOY: Okay. Thank you.

MR. GLICKMAN: Good morning. I'm David Glickman from Pension Consulting Alliance. Let me give you a quick overview of the real estate portfolio in the CalPERS funds. The good news is, as Rose described, real estate fundamentals are pretty solid right now. Occupancies are high and rental rates are increasing. Demand for real estate continues to be getting stronger.

The bad news. The bad news is it is still a market in which there's enormous competition to acquire the kinds of assets that you would like to see in your portfolio long term.

The outlook. We believe that there's going to continue to be the kind of good performance that you've experienced over the last year and three years coming from your portfolio for a number of reasons. We also believe that real estate will continue to get closer and closer to providing the -- performing the role that real estate occupies within the overall portfolio context, and we'll mention a couple of things going forward.

The good news about North American real estate markets is not pervasive globally however. And in particular, the BRIC countries in the emerging nations are

not seeing the same kinds of reliable, predictable growth in occupancy and rent that the U.S. is experiencing. So there has to be some caution over the next term about investing outside the United States to any great degree.

The discipline that has been employed by staff and by your separate account managers has been very, very good. And in spite of there being lots of competition, for the most part, CalPERS has remained true to its investment criteria and hasn't tried to chase deals. So we're very glad about that within the current context.

Finally, the character of the portfolio is continuing to evolve to a safer and more reliable overall risk profile. During the last six months, as Paul Mouchakkaa has reported the majority of your higher risk, lower control, higher fees, low cash flow producing investments in commingled partnerships have been disposed of. And that will again move the portfolio closer towards the position of producing current cash flow. And in the context of changing to cash -- from cash flow neutral to being in need of cash, the real estate component will be able to add to the overall portfolio.

MS. FIELDS: I know we're pushing time collectively. As much as I'd love to linger on real estate performance, I won't.

Really, I'd just like to highlight the five-year

performance, 13.4 percent relative to the benchmark, 50 basis points of net outperformance. I think this is testimony to all the hard work that staff has undertaken to restructure this portfolio and better position it to withstand the volatility that appears to be facing us all.

CHAIRPERSON JONES: Okay.

We have a question. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: As we've restructured the portfolio, it seems to me, and correct me if I'm wrong, that we're -- the characteristics of our portfolio are moving further and further away from the benchmark that we use, is that a valid assumption?

MR. GLICKMAN: I'm not sure I would agree with that, Mr. Jelincic, because the bulk of the benchmark that you use is the ODCE Index. And the kinds of properties, the level of leverage, the levels of occupancy in the ODCE Index properties, which is primarily open-end, large fund, is similar to the assets and the character of the Calpers portfolio.

At the time when your assets were invested in opportunity funds and value-added funds and more speculative investments, there was a wider divergence between the benchmark and your portfolio than there is now and is becoming.

COMMITTEE MEMBER JELINCIC: Okay. So we're

moving closer to the benchmark?

MR. GLICKMAN: Yes, sir.

COMMITTEE MEMBER JELINCIC: Okay. Thank you.

CHAIRPERSON JONES: Okay. So no further

questions on that issue. Thank you very much. So now we have StepStone Group.

(Thereupon an overhead presentation was presented as follows.)

MR. ALTSHULER: Good morning. David Altshuler, from StepStone, here to talk about the infrastructure program. We last provided an update to you on the program as part of the annual review in December. And since then, directionally things have not changed very much, which is good, because the program has continued to outperform across all of the reported periods, 3.2 percent for the quarter, 11 percent for the one year, 15 percent for three years, and 19.1 percent over five years.

Again, it has been a combination of the performance of some of the direct investments and commingled fund investments that have been driving that performance. For the remainder of this quarter, the staff, along with StepStone, will be working with each other to put together a draft of the strategic plan for actually all of real assets. That will include infrastructure. So that will be the next item that we

will be bringing to you I believe is a draft of that.

And that will address what I'll just mention here briefly today, because it would just be echoing what you heard from real estate, quite frankly, which is that it is an incredibly competitive market for infrastructure investing. That has not changed. In fact, recently, I think -- well, maybe the number of funds in market has declined, the size of the funds continues to grow.

This -- the end of Q4 and into this year, there are two funds in market that are seeking to raise over \$12 billion each for infrastructure, which is pretty -- and that's just within the context of the fund, putting aside co-investment capital that's being raised alongside it, so -- and funds are hitting their target.

So a lot of the focus has been with staff and StepStone is exploring options around that. And as with real estate, we do have to commend staff for remaining very disciplined in how they're evaluating investments. It's not -- it has not been an easy process trying to put money to work. But clearly, that's the right approach for the market.

I do want to point to maybe two developments in the infrastructure market that do represent opportunities from the way that we see it and are consistent with the guidelines for the program. The first is really related

to the shake up in the oil and gas market. That continues to show no sign of abating. What that does for infrastructure investors is create opportunities for investment in high quality infrastructure assets that are within the portfolios of some of these larger oil and gas producers.

So they own high quality, well located, contracted pipelines, storage, processing facilities, that in other times of the market would have been very difficult to try to pry out from them. But as they have -- the oil and gas producers continue to face challenges from the lending market and other sources of liquidity, they're looking to institutional investors, and so there's an opportunity there.

The second one I'll mention briefly, and it was obviously quite a big topic of discussion at your off-site, was the ongoing transition to a low carbon economy, which is a truly global phenomenon and one that has directly played out in the infrastructure space. That has been recently a very competitive market, because when you look at wind and solar resources, they tend to fit the mandates, not only of the many infrastructure investors that your familiar with, but also these public vehicles that have been set up to invest and to distribute on very tax efficient terms and attractive dividend.

Because of the volatility in that market related partly to -- probably more to exogenous factors that what's going on in that market, there's been more opportunity for other institutional investors to bid competitively on renewable assets. And I think we -- we're pretty optimistic that that will continue to be a source of opportunity that fits with the program.

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I did include a few notes in our letter to you on the P3 market. I know that's one that you're very interested in hearing about and we'll continue to try to update you on that. The reality is while there were several transactions, I think five, that reached financial close in the U.S. this year, it's a very small number, and the equity requirements of these transactions are even smaller.

There have been a few in California, so that's a positive. And I do think that over time, as these transactions reach financial close, and hit other milestones, we do anticipate seeing more deal flow. But for the time being, it's still a -- at an early stage.

So I'll stop there, and I'm happy to take any questions.

CHAIRPERSON JONES: Yes, we have a few questions.
Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: On the whole issue of

take-outs, and you're working on the strategy, so I will simply warn you that the question is going to come when we get to the strategy. You talked a little bit about take-outs in the sense of carving pipelines out of oil companies. But we also have a number of funds that are coming to the end of their lives who want to -- you know, the partner has gotten their profits, they want to get rid of it, and so I think that's an area that should seriously be looked at. And I hope it will get addressed in the policy.

The other -- and then I had a specific question. In your report, you referred to publicly traded yieldcos. What's a yieldco?

MR. ALTSHULER: So those are those vehicles that have been set up to -- basically along the line similar to an MLP have been set up to drop down assets that are operational, fully contracted, and can distribute a yield to investors.

And so they have been focused more on renewable investments, because they are the assets now that tend to be able to secure long-term, fixed rate, attractive yielding contracts. And so they have a low cost of capital, and they've been very competitive at acquiring renewables assets. And many institutions have gone up against them and failed in these auctions.

Because of the volatility, there's several factors. Some is just the slight increase in interest rates, so their costs have gone up, but also the volatility in the energy markets generally have brought down some of the -- both on the MLP side, as well as on the yieldco side. And so they have -- the developers and the sponsors of these assets that have been -- of the yieldcos that have been dropping down these assets have been more cash strapped and facing challenges. So that's just created, you know, a slightly better playing field for other institutions.

COMMITTEE MEMBER JELINCIC: So if I understood you correctly, yieldcos then are basically companies that are being created for the purposes of carving pipelines out of oil companies and that kind of thing?

MR. ALTSHULER: For holding -- it's primarily for holding renewable generation assets, so like wind -- wind farms and solar parks and so forth that are operated with long-term contracts, yeah.

COMMITTEE MEMBER JELINCIC: Okay. Thank you.

MR. ALTSHULER: Sure.

CHAIRPERSON JONES: Mrs. Mathur.

MR. ALTSHULER: And sorry -- sorry. Just to say your point, you're spot on too. And that was -- that should have made a way -- made its way into my notes that

we are looking to see exists from some of these earlier vintage funds. There's going to -- as always, there's a lot of competition for them, but that is a -- we're at a point in a cycle where we are seeing funds looking to wind down and seeking alternatives for that. So thank you for that.

CHAIRPERSON JONES: Okay. Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you.

You mentioned the P-3 market. And we -- as you will recall, we had three, I think, sort of road show or meetings --

MR. ALTSHULER Roundtables.

COMMITTEE MEMBER MATHUR: Roundtables -- thank you -- across the State, I don't know, five years ago or so, which we had hoped would cultivate and help spur more -- development of more of these projects.

It wasn't as successful or effective as we had hoped. Any thoughts on how we can help sort of -- to help spur the growth of the supply side here, so that we can have deal flow to invest in?

MR. ALTSHULER: Yeah, I think about it a lot, partly because it's what we do, but also because I know Mr. Jones and others have expressed interest in hearing more about it, getting involved in workstreams, and making sure that the market knows the institutions like yourself

are very interested in participating in.

The fact remains that it takes a lot of political will to get these projects off the ground. And I think it is, to some extent, a question of time. Someone made an interesting observation - I was talking to someone in the market - and right now interestingly the dialogue is happening in a very bifurcated way. So you have investors talking to investors and you have the developers talking to developers, but you don't have a lot of those workstreams, conferences and so forth, where -- so those roundtables are, I think, one exception to that, but they were on a very small scale.

So I don't have an answer, other than just, you know, we do try to say apprised of it, and obviously, we're doing what we can to make sure that -- for all of our clients that there's an awareness of the interest of investors in these projects.

COMMITTEE MEMBER MATHUR: I think at that time we had developed sort of a template term sheet as well. And I'm wondering if that has penetrated the market, if we've seen take-up of that, and whether those who might be putting these projects together are even aware that that is out there.

MR. ALTSHULER: Yeah, it's a good point. You know, it did get a lot of attention. There was actually a

fair amount of gratitude for that effort by CalPERS to come out and put out terms like that publicly, because it stimulated a lot of discussion. To your point, it hasn't translated into concrete activity. You know, to the extent that there's an ability to participate in the discussion is a good thing, but I do -- you know, being realistic, I don't see any easy answer to the problem.

I do think as projects are coming on line, there is just a greater appreciation for the risk and the value of using these modes of delivery. And we live in California and we know the need for this investment on a daily basis.

as a curiosity. I think Russia just announced that they are going to be selling off some assets. They are in a sort of cash flow crunch. And just curious what you're -- I mean, it's very early days. We don't even know what their -- what percentage of these assets are going to be selling off or what the terms might be. But any thoughts about the Russian --

(Laughter.)

MR. ALTSHULER: Not too much to say on that -- COMMITTEE MEMBER MATHUR: Yeah, fair enough.

MR. ALTSHULER: -- but happy to follow up with you on that.

COMMITTEE MEMBER MATHUR: Fair enough. Thank you.

MR. ALTSHULER: Sure.

CHAIRPERSON JONES: Mr. Slaton.

VICE CHAIRPERSON SLATON: Thank you, Mr. Chair.

You know, you discussed quite a bit this turmoil in the market, obviously in oil and gas, and therefore in the distribution facilities and the pipeline facilities, and the fact that there may be some additional plays going on in that market.

And then you contrasted that with the renewable market of wind and solar. But you didn't discuss transmission access electrical transmission lines being constructed to get to renewables.

MR. ALTSHULER: Yep.

VICE CHAIRPERSON SLATON: And given the fact that we have our ESG issues that we're dealing with, you know, from this Board member's perspective, I'd much rather own a transmission line to renewables than I would a pipeline moving oil, even though I understand the economics may be different. But I'd like you to comment on that, please.

MR. ALTSHULER: Yeah, absolutely. And that transmission build-out is very much a part of this overall transition to a low carbon economy and the requirements. Transmission lines are, as you can appreciate, are very

difficult to develop and permit and so forth.

VICE CHAIRPERSON SLATON: Yeah, we're -- SMUD is working on one right now, so I do know that.

MR. ALTSHULER: So it is very much a part of that opportunity with the build-out of renewables, and absolutely one that is, I think, very consistent with your program, post development stage, and so that -- that's the only challenge is making sure. And again, it's a -- it's one of the most competitive -- and the program has exposure to that sector already, and it's a -- yeah, it's very competitive.

VICE CHAIRPERSON SLATON: And so in both of those, in the electric transmission world as well as in the pipeline terminal and pipes themselves, help me understand that the volatility that those facilities really are pretty stable facilities, regardless of really what's happening in the marketplace. In other words, they're moving the product at a price. And so that price may vary a little bit, but if the market is up or down in oil or in electricity, those are contract-based assets, and therefore they have that characteristic of more stability than the product they're moving.

MR. ALTSHULER: Yeah. Yeah, and that's absolutely correct. And like any asset and any contract, it's really about the specifics of that, because that's

structurally correct. But location matters, so clearly that's going to be key.

And the second is there is a concern obviously, even with contracted assets, if you have an oil and gas company that's contracted with a pipeline operator to distribute and transport its supply. And if that company is having problems, then even if they provide a minimum guarantee, which had been the case, basically saying even if we're not needing to transport, there isn't demand, we're still going to pay you a minimum.

You know, you're up now --

VICE CHAIRPERSON SLATON: Assuming you don't have counterparty risk that you've --

MR. ALTSHULER: So that -- that's -- yeah, so that's exactly it. Yeah.

VICE CHAIRPERSON SLATON: Thank you.

MR. ALTSHULER: Sure.

18 CHAIRPERSON JONES: Okay. Question, Mr.

19 | Costigan.

COMMITTEE MEMBER COSTIGAN: Thank you, Mr. Jones.

A very interesting presentation. Just more of just a general question, sort of along the lines of what Mr. Slaton and others raised. When you look at the renewable market, and you look at infrastructure in general, I mean, you talk about the RPS in California, you

talk about the direction the Obama administration is going, you talk about where we're going to put principles in ESG, why do you see right now -- is it back to our earlier presentation, there's just panic in the market? Because you look at the renewable market, and it doesn't -- there's no corresponding as to where we see valuations versus where we think the markets are going.

And so absent, aside CEQA and others on getting -- eventual transmission lines will get built.

But if we're moving towards 50 percent RPS in California, you have the western states agreement, you have, as Priya has been talking about what's going on in the Paris

Accord, all point to it. Yet, you look at the valuations of these companies, you look at SolarCity in the last two, three weeks and what -- you know, Elon lost \$3 billion last week. And it's just a question, why do you believe that is?

MR. ALTSHULER: So just to make sure I understand the question, why are the valuations for this company so high?

COMMITTEE MEMBER COSTIGAN: No, I'm sorry, the stock values are so low. Why is that sector suffering so much, when you look at the reverse of -- the policy trends are to create a marketplace for them.

MR. ALTSHULER: Yeah. Yeah, it's a good

question. I mean, I do think, and it's surprising to see, we've been reading a lot of the manager reports that have come out from the end of the year, how much that the overall energy market, including renewables, has been hit by what's been happening specifically in the oil and gas market. So there really has been -- it's not one goes down and one has gone up. There has been this -- a lot of very good oil and gas companies, as well as others that are in related industries have been affected by that.

So that's one factor. I mean, that's across public markets in general. There's very few outliers, and they're not responding to policy, because policy changes and policy is more in view to be, in some cases, more sort of, you know, headline versus actual dollars at work.

So I think it's a -- I think what we're seeing is very positive trends in terms of supporting this kind of development and build out. But what you're seeing right now is more, I think, opportunities to pick up -- to either partner with developers or pick up assets that are getting caught in this overall, you know, energy market contagion.

COMMITTEE MEMBER COSTIGAN: Great. Thank you.

MR. ALTSHULER: Sure.

CHAIRPERSON JONES: Okay. There are no further questions. Thank you very much for that.

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Thank you very much.
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             MR. ALTSHULER:
             CHAIRPERSON JONES: It is 10:53, we are going to
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    take a 10 minuted break -- or 13 minute break or so, and
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    we'll return at 5 after 10 -- I mean, after 11:00 Thank
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         Looking backwards, right?
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             (Off record: 10:53 AM)
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             (Thereupon a recess was taken.)
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             (On record: 11:05 AM)
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             CHAIRPERSON JONES: We'd like to reconvene the
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    Investment Committee meeting, please.
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             Okay. This part of the agenda is the -- is
    CalPERS' Trust Level Review.
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             Mr. Eliopoulos.
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             (Thereupon an overhead presentation was
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             presented as follows.)
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             CHIEF INVESTMENT OFFICER ELIOPOULOS:
                                                  Yes.
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    you, Mr. Chair. Well, that was a terrific discussion this
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    morning. Lots of great material. Lots of great questions
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    from a very engaged Committee.
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             So our job here, flip-flopping with the
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    consultants, is not just to dwell on the slides to hear
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    ourselves talk. You know, so what you'll hear from us is
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    on the economic and market review, first, John is going to
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    spend five minutes or so picking out the slides that are,
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you know, most relevant coming out of the meeting.

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going to really just turn to one slide in the performance interview -- review -- overview portion of the slides.

And then Eric is going to conclude with looking at the risk profile of the fund.

So we tried, during the break, to really focus on the areas that are counterpoint, or complementary, to what we did this morning. If we did nothing else, this executive summary that's on the first or second page of the 40 slides, which also is the conclusion at the end of the performance, does pretty well in highlighting and underscoring the major theme that you heard from us this morning.

So with that, I'm going to turn the clicker over to John, and we're going to go over the quick look at the economic and market overview from our economist's standpoint.

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INVESTMENT DIRECTOR ROTHFIELD: Thanks very much.

COMMITTEE MEMBER MATHUR: Microphone.

INVESTMENT DIRECTOR ROTHFIELD: Is that it? Okay good.

Yeah. Thanks very much for this opportunity to talk to the Board again. Obviously, a lot has happened in financial markets in the macro since last time we were here. The -- I think it's fair to say that right now

markets, financial markets, asset markets, are leading the macro. Some of the macro indicators that are forward-looking, like six to nine months, have begun to turn down somewhat in some countries.

But the asset markets are now pricing in very weak economic outcomes in key areas of the world, like the U.S. and China in particular. So weak, in fact, that it would take a lot of climb down from economic performance from where we are now to achieve the negative outcomes that are being priced by financial markets. I would say that that's certainly the case right now.

Now, there's always, of course, the issue about financial market performance having negative feedback loops into the actual economy. So a lot of the declines in the markets can be self-enforcing or self-fulfilling in terms of the macro outcomes that we're going to get in 2016 and beyond.

But overall, I think my position looking at the balance sheet of positives and negatives in the economy in here and abroad, I would say that we're at a point now where excessively negative future outcomes are priced into markets, being very cognizant and respectful of the risks around that however.

So I know the Board often likes to talk about the positives and negatives in the economy, which is on page

five.

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INVESTMENT DIRECTOR ROTHFIELD: And I just did want to run through a couple of positives in the economy, which also Andrew highlighted, which is the labor market in the U.S. actually had a very good year in 2016 -- 2015. The number of job vacancies or job offers increased by 15 percent during 2015. The number of people who quit a job for a better job increased by 12 to 13 percent in -- during 2015. And consumers' perceptions about whether jobs are plentiful versus hard to get has fallen -- or has improved as much as the unemployment rate has fallen. So we're actually still in a strong jobs market in the U.S. in terms of the demand side for labor.

The housing cycle is also on an uptick in the U.S. Plans to buy a home have improved, and some of the activity in housing has switched from multis to single-family homes. So the single family piece, which had been lagging for a long time, and has better multipliers into the rest of the economy, that had a good year in 2015 for the first time during the economic expansion.

We're also at a point where households continue not to leverage up. So that's a double-edged sword, but it also means that the savings rates are out of current

income, households are still saving five to six percent of that income. That's providing a savings pool, which means we need less savings from abroad. It helps keep asset markets buoyant, because households can put that money to work in stocks and bonds, et cetera. So that story continue to be a positive for markets during 2015.

Global trade imbalances. You start to worry about them if there's de-synchronized growth. Well, the U.S. trade deficit is still only two to three percent of gross product. The surpluses in Japan, China, and Europe are about two to three percent of GDP.

You start to worry about global imbalances, when those deficits gets to five to six percent of GDP. So there are some positives to take forward in terms of economic performance.

However, we do have what we consider to be more concerns in the market. Some of them are reflected in the wall of worry that's already in financial markets.

Others, may be people aren't looking at.

One is the prospect for weak CapEx by businesses. Actually, CapEx by energy companies took off half a percent from U.S. growth last year. That's oil and gas extraction, and other forms of mining. U.S. economic growth would have been half a percent higher, if it wasn't for that collapse in energy investment.

Other sectors have actually -- of business CapEx have actually helped up pretty well. But in a low top line growth environment, with wages potentially starting to bubble up, there's the prospect that CapEx in other sectors of the economy might drop off a little bit in the next year or two.

And, of course, the point was made about political uncertainty. In the environment where the outcome of the election and the policies that follow are very uncertain right now. There's something called a political uncertainty index, which has been very low. That typically gets elevated right now, and it typically has an effect on business investment. So that is a worry.

Another worry, actually, is -- and this is a really key worry, is that it's not the business sector demand for labor that's a problem right now, it's the supply of labor. So currently, we have about five million job offers according to government data. We only have about 12 to 13 million people to fill those jobs. That's only 2.5 persons per job vacancy, which is very, very low. We typically don't get past that.

Also, if you look at where the unemployed or the employable are sitting right now, there's some evidence of a skills mismatch. So the employers -- the employees that businesses want are not available at the particular level

of skill. Also, a lot of the people -- a preponderance of people who don't have jobs right now are those who have been unemployed for more than 27 weeks.

So we have a degraded skills affecting the labor market. So ironically, one view is that we're much closer than we thought to an end of a business cycle, simply because the demand for labor can't be fulfilled by the existing stock of labor that we have left.

Another factor, which I think is important, is China. We've become more bearish overall or less positive overall, because of what's happening in China. China is actually running record trade surpluses right now. As the price of coal and iron ore and energy that they import has fallen off, they are now running and enjoying record trade surpluses.

On the other hand, they've started to leak capital out of China, and it's coming out at a rate of about a trillion dollars a year, if you believe their balance of payments. A lot of that is unidentified capital. Their balance of payments has something called an error and omission term. And a lot of capital is coming out that way.

There's a couple of key elements of that. Number one, it's a sign that returns on investments in China have weakened quite dramatically. And secondly, it compromises

the ability of China to be able to conduct independent monetary policy. If you get capital flight, you can't control your exchange rate and run independent monetary policy. It's called the impossible trilemma. So that is a key issue for markets.

So the overall feeling that I wanted to leave you from the so-called positives and negatives coming out of the economy right now, is that there are more things on the negative side to worry about. And a key one there is the tight supply of labor, and the prospect that CapEx could get weaker in the non-energy space, but there's also a lot of positives to think about as well.

Now, I just wanted to very quickly turn to two slides based on the interest that the Committee has already shown in other parts of the presentation.

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INVESTMENT DIRECTOR ROTHFIELD: And so page eight would be the impact on oil. So as the point was already made from the Committee, oil declining -- a country like the U.S. imports 15 percent of its net energy needs. So you would think that lower oil prices are good for the U.S. And you can see that the oil import bill during 2015 came down by about \$150 billion, which is a good chunk of nearly a percent of GDP. That's, on balance, good for the U.S. economy.

However, one of the regional Feds, the Atlanta Fed, has done some work on the growth impact of lower oil prices. And it turns out that in the first few quarters of declining energy prices, you get more of a negative impact on investment in the energy space in the U.S., and then the positives take third, fourth, fifth, seventh, eighth quarter to start positively impacting the economy.

And that seems to be what's happening here.

Every time we get a decline in energy prices and business investment falls off, we get another decline. So the --we're still at a point where the negative impact on the economy from lower energy investment is having more of a negative impact on the economy than the positives coming from the benefit to the consumer.

Now, the benefit to the consumer has shown up in some sectors like autos, where we had very strong sales last year. In fact, globally, auto sales are very strong. However, it is true also that some of this benefit, this wind-fall benefit to U.S. consumers, is also being spent on imports, imported goods, which doesn't benefit the U.S. consumer.

And a third factor is that our spending on health care in the first year of the Affordable Care Act access and usage of health care facilities, whether it be hospitals, general practitioners, et cetera, has gone

right up. And that's spent some of the dividend from low oil prices, and has probably less positive multiplier impacts into the rest of the economy.

So I would say, you know, one of the positive takeaways from that is potentially that if energy prices finally bottom out somewhere soon, we can start to move to the point where the positive -- the net positive from energy starts to help the economy, rather than the drag that we've had up until now.

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INVESTMENT DIRECTOR ROTHFIELD: And finally, I wanted to go on to page nine, which goes to the issue of the impact of the strong labor market on spending. And we looked at something called the Gini ratio, which is the dispersion of income growth within the U.S. economy by households.

And it is true that although a lot of the jobs growth in the U.S. has been by college graduates, a lot more young people are going to college, coming out of college, and taking a job, the Gini ratio is showing that during the expansion we've had from 2000 -- well, basically since the bottom of the economy in 2007 to 2014, most of the lower income groups have experienced a decline in their real incomes.

It's only been the top, you know, tenth

percentile basically that's experienced an increase in their real incomes. Now, if you took 2014, just the year itself, and 2015, one of the good things happening right now is that more of the lower income households are starting to experience an increase in their income, and inflation has come down close to zero.

So if you took -- if you isolated this to '14 and '15, you're starting to see that dispersion of income in the U.S. started to flatten out a little bit. But overall, you can make a case here that the dispersion of the income improvement during the last seven years toward people with a high savings rate has kept the savings rate elevated and spending low in the economy.

As I mentioned before, you know, one of the positives to take away for the future is we have started to see the lower income do well in '14 and '15. And then if you look at the chart on the right-hand side, the bottom 33 percent of income earners, their expected change in their financial situation has picked up since 2013.

So maybe we're at a point in the business cycle where hopefully we can get some economic drivers coming out of the bottom third or bottom 50 percent of householders starting to gain a little bit relative to inflation.

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INVESTMENT DIRECTOR ROTHFIELD: And then finally on page 15, which I think sums up everything in terms of the longevity of the economic expansion and asset market performance, the chart on the top right shows that all financial -- non-financial debt in the economy has been very stable. Governments have been deleveraging.

Although, that has started to ease out a little bit. Households haven't increased their leverage. Corporates have increased their leverage a little bit. But overall, we haven't had kind of the leverage buildup which caused the expansions of the 1980s and the 2000s to flame-out very quickly.

So all else equal, one could say that the expansion can go on longer. And again, my main worry is that we're running out of suitable labor to fuel the next two or three years of economic expansion. But everything else equal, we're six and a half years into recovery. We could potentially go another two, three, four years.

On the other hand, if you look at the chart below that, one of the indicators that economists look up is household net worth as a multiple of disposable income. We highlighted about a year ago that that had become very elevated at 6.5 times one year's income. So that's the value of all the houses and all of the stocks and bonds held by householders in the economy.

Typically, when we've reached valuations like that, it's hard to continue to get the high returns on investments. And, in fact, what's happened in this cycle is we've actually retraced a little bit.

So overall, I think the theme that's coming from the macro is that markets are pricing in a very weak macro-outcome in everywhere from the U.S. to China, and perhaps to Europe. That may be underestimating the scope for policy response and everything else to actually outperform the expectations that are built into the market. That, to me, is still the most likely outcome going forward.

But the valuations are also saying that we're in -- from a macro, top-down perspective, we're also saying that at this stage of the business cycle, we're unlikely to have very strong growth of asset prices, just asset price growth that tends to match GDP, if you like.

CHAIRPERSON JONES: Okay. Well, thank you, Mr. Rothfield, for your insights and comments. And we do have a few questions at this time.

Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you. I do have a couple questions. One is about the concentration of certain industries in our economy and here in the U.S., and whether you think there is -- we have the right level

of diversification of industries in the U.S., or whether you think there's a need for -- and I guess what I'm really driving at is sort of the -- is the concentration of the financial markets and the too big to fail risk.

And I'm concerned that we've seen greater consolidation in that industry, and that that risk continues to amplify for the U.S. economy and Americans more broadly.

I'm just curious if you've had -- you have any thoughts about that.

INVESTMENT DIRECTOR ROTHFIELD: The feedback I think I'm getting from counterparties in the part of the Calpers business that I have is that basically regulation has taken out some of that tail risk in, you know, financial intermediation, et cetera. And, in fact, it may have been a drag on the economy in terms of being able to get good financing at good rates.

So in terms of concentration, et cetera, I -- we could -- I could take that off-line and take a little bit of a -- more of a look at it. But I think the regulatory response, if anything, has been something that has probably reduced the tail risk of another downturn in the economy.

As far as the other elements of the economy, you know, manufacturing continues to be about 10 percent.

Most of the driver of the economy is the services sector.

And that seems to be in pretty good balance. You know, we have a PMI in that space above 50. We have small businesses saying that their main problem is they want to hire people, but they can't find them, and they're thinking of increasing pay in that sector.

So overall, I don't see too many problems in the industrial balance in the U.S. economy right now.

COMMITTEE MEMBER MATHUR: Okay. Thank you. And my second question is about the emergence of what I've heard called the gig economy. You know, this is the Lyft, the Airbnb, the sort of aperture of an on-demand services by individuals. And I'm just curious whether -- what kind of impact you think that is having on the economy and -- or will have moving forward?

INVESTMENT DIRECTOR ROTHFIELD: There's a lot of controversy about whether gross product as it is currently measured can accurately capture that part of the economy. We see things like the taxi industry going down, but we may not see the uplift in other forms, or folks using iPads for long periods of time, is that captured in terms of GDP relative to some of the recreation -- you know, the sequential recreation that people would be doing, which is always captured by GDP.

The overall sense is that there is a non-negligible impact on GDP from that, and that's showing

up in low productivity numbers. So we're getting a lot of -- in the past year basically productivity in the economy is less than one percent. We're getting strong jobs growth, but no GDP growth, very little GDP growth for that. That's partly because we're getting into this end-of-cycle, where it's hard to get skilled labor that's highly productive, but also perhaps still because we're underestimating the impact on GDP.

Now, the government is making steps to try and measure that better, and they've done some revisions to GDP as a result of that. So they've started to address that issue, but I do think there's probably an understatement of GDP that's coming from that source.

COMMITTEE MEMBER MATHUR: Thank you.

CHAIRPERSON JONES: Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Let me ask you the question I asked Ted earlier. How do we get fiscal policy back as part of the discussion? You know, we're asking monetary policy to do well more than it was designed to do. It's sort of like diversification, we're asking it to do more than it can. So what does it take to get that discussion going again?

INVESTMENT DIRECTOR ROTHFIELD: I think that's a good question. I think Mr. Junkin answered one element of that question also when the question was we already have a

tight labor market in the U.S. So it is true that probably some infrastructure spending in the U.S. would have a higher rate of return. It's kind of underestimated rate of return. So, you know, a government program that increased infrastructure spending would have quite a high rate of return.

It's also true that State and local spending has actually started to pick up in the economy. We're five or six years into an expansion, and finally that segment of the economy has started to do some CapEx and employment that it hadn't been doing before.

So it's certainly encouraging to have ended a phase where we had a fiscal cliff at the federal level -- a couple of fiscal cliffs, State and local weren't spending. They were, you know, taking the extra revenue and worried about future liabilities. We've now started to see government orientate toward one to two percent growth a year, which is greater than -- certainly much better than the couple of percent decline in government spending we saw early on in the expansion.

But one of the problems in the U.S., apart from, you know, competing needs for tight labor right now, is the fact that the Congressional Budget Office recently put out a report that said by 2018, this slowing down of the U.S. federal deficit is going to start sharply moving back

the other way. As we get into the aging of the population, it starts to affect spending on Medicare, Social Security, et cetera, and then, of course, the political uncertainty about who's going to take over after the next election.

So, if anything, probably the next President here will be looking at fiscal tightening again in order to address the issues about increasing future liabilities for the government. In other countries, I think you're starting to see, I think, Japan has done something like a dozen fiscal stimulus programs since 2007. In fact, it just did another one in December for this year. It's only having a limited impact on the economy, because they can only build a certain number of bridges or projects. People don't want to work in construction work there. They have tried to cut taxes to offset the consumption tax increase.

Europe is allowing slightly higher budget deficits as a result of the migrant influx that's happening there, and China is also doing some fiscal stimulus as well.

I think the question is appropriate though, because if you've got six or seven countries with negative interest rates out to five years, there is a limit to how much monetary policy can do, and you probably are going to

have to see if this -- if things get worse here, more of a fiscal response in various countries, including China actually, where government debt is actually fairly low. That could be an area where they could be doing more.

COMMITTEE MEMBER JELINCIC: And going way back to my Econ 1A, savings equals investment. And if we're not doing CapEx, where's the investment going? Savings are rising and where is investment?

INVESTMENT DIRECTOR ROTHFIELD: Well, actually again, if you look at investment as a percentage of gross product in real terms, it's actually quite high right now and would even be higher, if it weren't for -- if it weren't for the decline in energy investment, which obviously has its own special factors going on.

So I would actually say that the savings pool that we have here has tended to keep asset markets strong, including low bond yields and high stock valuations. And that has tended to encourage investment in other areas.

It's also meant that we've been less reliant on foreign capital. In a world where we're leading the global economy, typically by now the U.S. trade deficit would have gotten out to five to six percent of GDP.

International lenders lend only with a penalty. You know, there's a higher cost to borrow from abroad.

So overall, I would say that this pool of savings

in the U.S. actually has been helpful for investment in the economy outside of the energy sector.

COMMITTEE MEMBER JELINCIC: Is CapEx outside of energy growing?

INVESTMENT DIRECTOR ROTHFIELD: Yes, it is. And it's actually -- yes, it's growing. I can get you the exact numbers, but if you take oil and gas extraction out of CapEx, it's actually growing four to five percent in real terms.

COMMITTEE MEMBER JELINCIC: Okay. And then I had one other question, but it relates to Attachment 3. It was page nine of three. And I will either defer the question till we get there or raise it now. It was the question I'd raised on the briefing about that one chart that didn't make sense to me, Ted.

Lower left-hand corner. So I'll either ask it now or defer until we get there, whichever makes the most sense.

CHAIRPERSON JONES: Ted.

CHIEF INVESTMENT OFFICER ELIOPOULOS: We're good to take it now.

CHAIRPERSON JONES: Okay.

COMMITTEE MEMBER JELINCIC: It's --

24 CHIEF INVESTMENT OFFICER ELIOPOULOS: We might

25 | not be able to flip all the way to it, but --

COMMITTEE MEMBER JELINCIC: It's Attachment 3, and it was page nine of it. See if I can find the iPad page for people. It's -- well, I'm sorry. No, it's page three of nine, rather than -- so it's six of nine of the iPad. Oh, no. I'm sorry. My mistake again. It's actually in Attachment 2. I'll get it right one of these days.

So it's 600 of the iPad, Attachment 2, page three of nine. The lower left-hand chart, which is hourly earnings versus available person. That chart makes -- I'm not sure that makes any sense to me when I try to read it.

You know, we've got wages going up when there's 10 people available for each job faster than when there's two and a half people available.

INVESTMENT DIRECTOR ROTHFIELD: Right. It shouldn't make sense because the normal Phillips curve relationship should say that's a backwards sloping curve. But to the points that have been made by the Committee, that just hasn't been happening in this upturn, right? So -- but we're now at a point where that's starting to turn around a little bit, as we get to this point of very tight labor. We're getting down to two and a half persons per available job.

We are starting to see a little bit of a pick-up in wage growth. There are some other leading indicators

that I mentioned before, like quitting and hiring, and small business difficult to find workers, plans to increase compensation. They're just starting to go up now.

So some more optimistic economists saying we're about to move into the more positively sloped part of the curve, where we start to get a wage dividend coming out of this tight labor market. Of course, the other thing it could be is because we don't have the right skill set. Firms just put off production. That's the worry without getting into the higher wage phase of the expansion.

COMMITTEE MEMBER JELINCIC: So the curve in this particular diagram is actually then influenced as much by time. If we had put time across the bottom, we would have a similar type curve.

INVESTMENT DIRECTOR ROTHFIELD: Yes, that's right. You -- the start of the economic expansion was basically up in the top -- the northeast of the -- and you're coming down as the expansion goes on. So that best fit line should almost be an arrow. You're starting to move to the left.

COMMITTEE MEMBER JELINCIC: Okay. Thank you. CHAIRPERSON JONES: Mr. Costigan.

COMMITTEE MEMBER COSTIGAN: Thank you, Mr. Jones.

So I'm going to get a little more basic, because

I was a history and political science major. So I'm trying to understand all of your information here. One thing that they did teach us in history class was you learned from the mistakes of the past to try to avoid them in the future.

When -- last week I spoke at a conference, one of the questions I got asked was did I think we were going into recession? At least, I don't believe we are, when you look at your fundamentals, the documents that you're talking about.

But I would like you to just take a couple minutes. What is different today than in 2007/2008, or do -- I mean, if we talk about we're a long-term investor, everything is cyclical, the one thing I've learned from Mr. Eliopoulos over the last few years and Mr. Dear before that is just don't sweat this. It will -- the ship will right itself and long-term things are better. Don't panic in the moment.

So what you've presented is a snapshot in time of where we are. What's different today from where we were five or six years ago? And then the one question -- and I may have misunderstood. I thought a few minutes ago you said one of the problems we had in the labor market was not enough skilled workers. Yet, on the negatives, we've got available persons to fill job openings very tight at

2.5. Does that mean we have two and a half -- 2.5 workers for every opening?

right. So we have about -- and the government data on this is not great, but we have -- the government has identified there is about 13 million job openings in the U.S. and about -- sorry, five million job openings and about 13 million people to feed them -- to fill them. So that's not only unemployed people, but people outside the labor force who are more likely. So it's more like that U-6 version of underemployment.

So, yeah, we're at a point now where that's the case. And also there's something called a Beveridge curve that essentially shows that of the jobs that are around, it kind of proves that the jobs being offered don't match the skills of the people who are available.

COMMITTEE MEMBER COSTIGAN: Okay. So sort of back to my question as to what's different today? The other is if we believe that we are eight -- up until December 31st, we were eight years into a bull market, you know, that oh, we had passed it. It's also cyclical. Are we looking at this down curve or downturn as lasting -- should we take the last eight years and say we had a longer run, therefore we should expect a longer run on the downside? I mean, what do you see as our economist, I

mean?

INVESTMENT DIRECTOR ROTHFIELD: Well, the -getting back to the chart that I show on page 15 on the
regular thing -- and I want to refer directly to the
chart -- the issue about the -- the last four expansions
have been relatively long, have been six years, seven and
a half years, 10 years, up until now. And this current
expansion is six and a half years long, as measured by the
Bureau of Economic Research.

So a lot of folks are saying, okay, two of the last three expansions have only lasted six to seven and a half years. We're already at six and half in this one. Why won't this expansion just die of old age or something? And there is that argument there, which I think is a really key argument, which is demand for labor is quite strong, but the workers to fill that labor is not particularly there.

So you're faced with the issue where it's either high -- very difficult or expensive to start hiring people, and that starts to impact the chance of a recession.

So because of that tight labor market, we're more likely now to be closer to the end of the recession -- of the expansion, just because the labor market has gotten really tight. And the available pool of workers to pull

in to be hired, and then those hires go ahead and spend and form households, that's starting to dissipate somewhat as we get toward the end of the cycle.

COMMITTEE MEMBER COSTIGAN: But that's very -
I'm sorry. That's very similar to what happened in 2006.

We saw very low unemployment. So I guess what I'm trying to get at is what is different today that at least you see that was not --

INVESTMENT DIRECTOR ROTHFIELD: Well, the difference today is the expansion in the 2000s was driven by leverage, so households -- home equity loans, big increases in government spending to finance the Iraq war, State and local governments were using the revenue coming out of the housing boom to increase their spending, corporate leverage was growing at the end of that expansion at about 12 percent a year.

And, in fact, just handily, for your reading later on, that chart -- page on 15 has what was happening in the end of that last expansion versus what is happening now. So it's the big increase in leverage that was happening in the economy that was bound to end badly at that point.

The -- so as soon as the markets started to peak out and turnover, that leverage -- capitulation of leverage started to have a major impact in the economy and

we had a very deep recession. We haven't had any growth of leverage this time. The stock of outstanding mortgages through the first six and a half years of the expansion has been absolutely flat.

Corporates have leveraged up somewhat, but relative to the valuation of the firms has actually been fairly stable. It hasn't been alarming. And, of course, the government sector has deleveraged. The government borrowing need has come down as growth has started to increase revenue coming to the government.

So that factor alone adds some optimism that the expansion can go on for longer, because we haven't had the -- kind of the leverage blowout that typically leads to a sharp reversal in the economy.

COMMITTEE MEMBER COSTIGAN: Okay. So just one last question, sort of on the leverage. So I'd always understood paying down debt is a good thing. So when we talk about the fact that Americans -- or households are not taking out more debt. It's not the balance on the credit card that we're concerned about, it's the fact that when we talk about debt, it's either the mortgage or the car? That's what I try to correlate.

So the market penalizes itself, because households save more or payoff debt, which I always that was a good thing, and prices would rise if we go into more

debt. I mean, that's --

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INVESTMENT DIRECTOR ROTHFIELD: Right. It's a paradox of thrift, right? You -- saving is good for the individual, but for the economy it's not necessarily good. I would argue again that the fact that we've had this very large pool of savings -- and you can see it in the Federal Reserve's Flow of Fund Statement. The fact that we've had this persistent pool of savings coming out of the household sector means that we've had to borrow less from abroad. And that money can be fickle and purchased at a higher price, and it can make the dollar even stronger, which you don't want.

And so it's actually been good for the economy in keeping asset markets elevated, including low bond yields, which has allowed businesses to invest. So I would argue that there is a paradox of thrift. Probably the balance probably would be a little bit more toward more spending by the consumer rather than saving, but there has been a dividend in terms of asset market performance, which has led through into business spending and other things.

COMMITTEE MEMBER COSTIGAN: All right. Thank you. Thank you, Mr. Jones.

CHAIRPERSON JONES: Okay. Mrs. Hollinger.

COMMITTEE MEMBER HOLLINGER: Thank you.

I'm a little confused, because the federal debt

has more than doubled since 2008. And a lot of this expansion has been led by quantitative easing, and we have more debt levels. I know you're making a distinction, I believe, between personal -- or are you making a distinction between personal household versus debt, and also, you know, what role is China playing in all this?

INVESTMENT DIRECTOR ROTHFIELD: The last spike up in debt that happened in the charts that I've provided really happened in 08/09, which is when -- we built up a lot of debt during the Iraq war.

COMMITTEE MEMBER HOLLINGER: Well, I'm seeing here just on Google that, you know, it's 58 percent higher than in 2008.

INVESTMENT DIRECTOR ROTHFIELD: It certainly is. And if you look at government debt has certainly risen, but the stabilization of debt has basically happened since 2010, where federal debt got to about -- I think it was 18 trillion or something. It got up that high. The cost of the Iraq war -- the Iraq and Afghanistan war before we started to step down in that field, and before we started to get any revenue improvement in the economy, and we had some programs during the Great Recession to try and boost the economy.

So that all peaked out in about 2009 out, earlier 2010 in terms of that debt trajectory. And then we

started to get the payoff in terms of improved revenue in the economy. So at that point, the budget deficit I think three or four years ago was 1.2 trillion a year. It's come down to about 400 billion a year. That's still a deficit, but the funding of it has come down a little bit, because interest rates on government debt have been very low.

So the government debt growth since 2009/2010 has been very slow. And it's actually been offset by the fact that household debt is still coming down. Household debt, as a proportion of GDP, has actually come down. So the government debt is still growing a little bit, but household debt is coming down, and that's kept the whole debt relatively stable since 2010.

COMMITTEE MEMBER HOLLINGER: Okay. Thank you. CHAIRPERSON JONES: Ms. Taylor.

COMMITTEE MEMBER TAYLOR: So thank you, Ms.

Hollinger, because you made me think of something. I just wanted to know, given that we've already done quantitative easing, if we do go ahead and start this negative interest rate, what impact will that have on this view going forward in terms of the economy?

INVESTMENT DIRECTOR ROTHFIELD: Well, of course,

I think the negative interest rates would be a reflection

of the fact that the economy had gotten more severe. One

of the reasons I think the dollar has stopped rising is the market has now said that the Federal Reserve, even though it raised interest rates in December, is not going to do it again this year at all.

But if we started a price in the outcome of a negative interest rate, it would mean the economy is much worse than we think it is now. And, yeah, I think that would have a lot of repercussions for the economy.

We haven't really seen the payoff in other countries in terms of what's supposed to happen when you get to negative interest rates is households put that money to work. They don't want to go out and buy a mattress. They want to -- why -- there's no way you would hold money at negative interest rates. You would start to put that money to work.

But in places like Japan that really hasn't happened. And in the U.S., the problem would be that you'd get negative wealth effects from having negative interest rates. So people who relied on interest income would actually be experiencing a downturn.

So I think if we had to move into negative rate territory, that would be a sign that the -- kind of the more constructive outlook that I'm -- in a challenging returns environment that I'm talking about for markets would be a wrong outcome.

COMMITTEE MEMBER TAYLOR: Right. And then so -- and it also makes me think that what J.J. had talked about, which is rather than monetary policy ruling our economy, we need to really focus on fiscal policy as well as you had talked about the skills are no longer matching the jobs for workers.

And I think that's a product of the fact that we've had our workers out of work for so very long. So fiscal policy that would also address the skills gap, I think would be something that would be advantageous. I don't know how we -- how we, as a Board, helped that along or anything like that. But I think that seeing these gaps and theses problems would be something that maybe the Board could address at a -- in our ESG or something.

INVESTMENT DIRECTOR ROTHFIELD: Yeah, I -- well, I think one of the positives is that, as I mentioned before, State and local, which employs a lot more people than the federal government, they really have started to increase their CapEx and employment. They've -- their revenue stream has improved for two or three years. And instead of banking that for future unfunded liabilities, they're starting to spend that a bit.

So the key is probably what's happening in the State and local sector, as opposed to the federal government, but -- and in that regard, there are some

encouraging signs.

COMMITTEE MEMBER TAYLOR: That's a good thing.
Okay.

CHAIRPERSON JONES: Okay. Thank you.

Next.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Well, I'm going to try and save us some time here, because I do want to make sure that we have a little time for Eric to cover risk. This was the slide that I promise I'd pause on, because I think we've --

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CHIEF INVESTMENT OFFICER ELIOPOULOS: -- focused quite a bit on total performance of the fund and affiliate funds and the individual asset classes. This is interesting. Last year, we paused on this slide as well with the triangles that pinpoint the ALM expected return in risk of the total fund, and each of the asset classes. So that was the 2013 ALM workshop.

So the triangles in terms of the risk and return were looking out 10 years, so from 2013 to '23 and those were the capital market assumptions that we had for each of those asset classes.

Last year when we looked at this, all of the expected returns and risk positions of the total fund in each of these asset classes we had higher returns and less

risk than what -- when we came to our actual results. And we paused to say that Goldilocks moment probably would not hold. And lo and behold, here a year later, we're starting to see some of the triangles and the squares moving. And the squares, as I alluded to, is the actual. And the actual is our three-year returns. So we're looking at the 2013 to 2016 time period.

And now with this, you know, latest set of return and volatility information, we're seeing some moves, particularly the public asset classes. And that was reflected in some of the discussion earlier about, well, we haven't really seen the private asset classes being marked like the public asset classes.

So I'll just dwell here to note on the big picture is the Goldilocks, you know, moment from a year ago has definitely moved. And you can see, for instance, fixed income, the expected return from our fixed income portfolio in the green triangle, we've now experienced, at least over the three years of this period, a lower return from fixed income than we had forecast over a 10-year period.

Similar, in equity space, the EQ, we're about even now, in terms of our expected return over a 10-year period that what we've experienced. Certainly in inflation and forestland, we now have experienced, you

know, much lower returns than were expected.

I think to point out is looking up at the top left-hand quadrant you see private equity and real estate and infrastructure hovering there in the stratosphere of much higher returns than were forecast, and much lower actual or realized risk than was projected.

And I think the expectation would be for those return profiles to come down, and the continuing volatility that we're experiencing is sending the squares to a closer point than the triangles, which is what we would expect when we sit here in 2023 and review the capital market assumptions at that time.

So with that, that's probably a good segue to turn it over to Eric to move on to the risk.

CHAIRPERSON JONES: I think we have one question this, Ted.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Yes.

CHAIRPERSON JONES: Mr. Jelincic.

and it's the point I raised in the briefing, private equity, by and large, is smaller and more highly leveraged than public equity as a whole. And yet, it shows higher return, which you would expect, but lower volatility, which is intellectually not expected or reasonable. It has a lot to do with how it gets marked, rather than the

reality.

But, you know, it's just -- I wrote a big no. I mean, it just can't be.

CHIEF INVESTMENT OFFICER ELIOPOULOS: So we'll wait till 2023. I think the only other point is I think we all collectively agree on that point. If you look at the triangle for private equity, you can see in our capital market exemptions -- capital market assumptions, we assume a much greater volatility for private equity than we've ever actually realized.

So, Eric.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay.

Let's see, to close out the morning here. Eric Baggesen,

Managing Investment Director for Asset Allocation and Risk

Management.

We lost our -- what I was going to -CHIEF INVESTMENT OFFICER ELIOPOULOS: You're the

grand finale.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah, exactly. I was going to turn to page 31 of Attachment 1, which is simply a page of bullet points and risk highlights. And this really is about kind of the current activities that are happening in the marketplace.

One is that our current volatility estimates, and

these are estimates that were done based on December of 2015 data. Here we go. Bear with me for a moment while I get up to page 31.

CHIEF INVESTMENT OFFICER ELIOPOULOS: They were fast-forwarding to the next agenda item. They were so eagerly awaiting the next item.

MANAGING INVESTMENT DIRECTOR BAGGESEN:

Thirty-one, here we go, risk highlights. So one, our volatility estimate, based on December data, shows volatility just about 10 percent. And that is based and is derived from the BarraOne Risk System that we utilize for the plan. So that volatility estimate though actually maps some of those private assets into publicly traded instruments, so that there is some reflection of some of that market volatility that Mr. Jelincic and other commentators have mentioned today.

So it is not a completely smoothed attribute that it impacts this volatility estimate. One of the things that really needs to be focused on though is that of all of the risk of the plan, we still have approximately 86 percent of that risk being derived by about 64 or 65 percent of the assets, which are the equity oriented assets of public equities and private equity. We've obviously been seeing some significant price change in the public equity portfolio.

The fourth bullet point down on the page reflects the beginning of January, and really this is an opportunity to think about the calculation of VAR, or value at risk, which is probably an inadequate statistical expression of what risk may be translated into dollar terms.

So when we calculate VAR and you see this in the risk reports, our VAR estimate from last year -- from the end of last year was that public equities would have a downside potential in a 10-day period of approximately \$7.2 billion. And yet, we experienced in the first 10 days of January -- or up until the middle of January, we experience an equity downdraft of over \$13 billion.

So that's just an illustration of when we get past the sort of normal outcomes, which is what VAR is based on, into the territory of conditional VAR, which is out of the tail risk, that the outcome and experience can be significantly different than the models would estimate.

And yet, even given this outcome, this is not a completely unanticipated order of magnitude of change, because we would expect that almost a single time every year, that we could experience this kind of an outcome.

So there's nothing particularly unique about what's been happening in the marketplace so far on a year-to-date basis. But I think it is just a cautionary

note to all of us, we need to be very thoughtful about the reliance on the statistical measures of risk. And all of that is driven by volatility. And as we all know, it is not the only measure of risk to Calpers.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: The other page that I would point your attention to -- and this page 33 in the materials gets back into the contributions of the VAR calculation.

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MANAGING INVESTMENT DIRECTOR BAGGESEN: The other page though that I think is worth looking at is page 34. And the two pie charts on this page are very similar to the pie charts that Wilshire Associates had in the material that Andrew and Rose presented this morning, showing one is the allocation. So the left-hand pie chart shows the actual allocation. So again, you see public equities and private equity adding up to about 64 percent of the plan. And yet, when you add the private equity and the public equity risk contributions, you come up with approximately 86 percent of the risk.

So that's where it really shows that the risk in this plan comes from the equity investing, which is also the area that happens to be generating the expectation at least of a significant amount of the return.

The line chart on the bottom shows the outcome for our growth asset class, which is public and private equity versus the outcome for the total fund. You can obviously see the dependence that this fund has and has had for a long time on equity investing as a source of return.

As interest rates have declined for the last two decades, the result of that is basically having more and more reliance on equity investing and the risk attached to that as a source of return to try to underlie the promise that's been made to the beneficiaries of this plan.

And I think with that, I would probably stop, other than to tell you that given the current volatility in the market, we are monitoring our counterparty risk, our liquidity issues and all of that very carefully. And currently, we're not seeing any particular problems, although counterparty risk has been climbing, and CDS spreads have been widening. So we'll continue to monitor that.

And I would just ask if you have any questions.

CHAIRPERSON JONES: Yes. One question, Eric,
regarding the allocation versus the volatility. If and
when we move into factor based -- factor based risk
allocation would this contribution to volatility be
reduced in that kind of environment?

MANAGING INVESTMENT DIRECTOR BAGGESEN: That's a good and interesting question. And obviously, we'll have to see what we discover through that process. I would suggest that I don't think there's any silver bullets in the risk factor work. I think that, to some extent, we're talking about attempting to place more meaningful and hopefully more stable labels on some of the artifacts that are currently impacting Calpers. I do not think that by changing the labels, that that's going to radically change the risk profile.

The only thing that will start to change this risk profile, is if we're actually able to allocate money into some kind of different assets. And to some extent, that's what the funding risk mitigation policy, for example, attempts to do.

But as you'll hear in the next agenda item, a part of that tradeoff is a literally moving from equity risk into what historically has been more fixed income and interest rate sensitive risk. So that ultimately, Mr. Jones, I think is going to be the outcome of that. I don't think the risk factor work specifically is going to change our risk profile.

CHAIRPERSON JONES: But when you look at your risk factor work, and you identify different assets that are as volatile, isn't that the whole process, then you

start to move those out, so that you can reduce that volatility?

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MANAGING INVESTMENT DIRECTOR BAGGESEN: Yes. So I think what you're describing it's the combination of the risk factor work, the portfolio priorities, the benchmark assessment work. All of those things, it's unclear how far we'll be able to actually impact our risk profile. mean, certainly we think that we can move things in the right direction, but it's unclear the order of magnitude. And I truly -- I need -- I think we need to be very, very circumspect about just how big an impact that these things can ultimately have. So we're probably talking marginal impacts in contrast to step function impacts, because for step function impacts to happen, we either need a radically different asset allocation or there's got to be some asset out there that has yet been unidentified that suddenly presents itself that completely behaves in a way different than all of the existing assets in the marketplace currently behave. And I don't really think that that's a rational expectation to find that kind of exposure.

CHAIRPERSON JONES: Okay. Thank you.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Well, I've got three of these assets back in my office. I'll share them with

you.

(Laughter.)

COMMITTEE MEMBER JELINCIC: But on the counterparty risk, you said we're within our limits. Have there been any of our counterparties where the risk has changed enough that we've at least taken a serious look at whether we ought to lighten our exposure or narrow our definition of what we will accept?

MANAGING INVESTMENT DIRECTOR BAGGESEN: To date, there have been no counterparties that have been moved from an acceptable profile to an unacceptable profile. The risk attached to certainly some of the European banks has been elevated. So, for example, Deutsche Bank, the CDSs started to spread out relative to some of the other larger multi-national institutions.

So we're monitoring that situation, but we have not had anything where we've actually had to modify our exposure as yet. But that's something that again we look at basically on a continuous fashion. And there's been a fair amount of discussion within the trading desk and the execution desk and the risk folks about that.

COMMITTEE MEMBER JELINCIC: Yeah. Deutsche Bank shouldn't be a big surprise, but have there been others that we've said, yeah, let's take a little closer look?

And I'm not going to necessarily ask you to identify them.

I'm just --

MANAGING INVESTMENT DIRECTOR BAGGESEN: I would suggest that we're looking at everything. And certainly when you see CDS start to move, and it's moved not just for Deutsche Bank, but all of the banks, Goldman Sachs, Citigroup, all of the financial intermediaries. As the market has hit a patch of turmoil, that spreads into anxiety about these institutions that tend to be highly leveraged. And the effects of leverage obviously can be a magnifier on risk. So again, we're monitoring all of that, but we haven't changed our posture in relation to any particular counterparty as yet.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Mrs. Hollinger.

15 COMMITTEE MEMBER HOLLINGER: Yeah, thank you.

Thank you, Eric. This is great, but two questions.

On the first one, when you were saying it wouldn't really change anything if we relabel something because, you know, this 84 percent of our risk comes from two asset classes, but what would change, or correct me if wrong, is it would be a paradigm shift to preservation of capital, correct?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Again, I think that you're absolutely right, and -- but I think we need to be careful about the order of magnitude at which

we think we can move.

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COMMITTEE MEMBER HOLLINGER: Right.

MANAGING INVESTMENT DIRECTOR BAGGESEN: So, yes -- yes, we want to move in that direction, but I don't think we want to move in that direction to the exclusion of removing all potential for generating return.

COMMITTEE MEMBER HOLLINGER: No, I agree with you, but that would be the direction.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yes.

COMMITTEE MEMBER HOLLINGER: And my second one is do we have a means to monitor overall risk among the different asset classes or sectors within our portfolio?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Well, again, that's -- I think the information that comes through the Barra system, it's hard to overstate the degree of complexity attached to the modeling of risk for Calpers --

COMMITTEE MEMBER HOLLINGER: I can't even fathom.

MANAGING INVESTMENT DIRECTOR BAGGESEN:

-- because literally feeding the Barra system, in essence, takes loading 50 to 60 thousand positions and some extrapolation of risk attached to those positions, and assimilating data across hundreds and hundreds of investment vehicles.

So once we do all of that though, that literally

then moves things into some kind of a common framework, because literally you obviously have a very challenging world when you go through the artifacts that we talked about in relation to the private assets, the smoothing that attaches to pricing of real estate and private equity assets, in contrast to this phrenetic bouncing around of price that you see in things, like the public equity market.

So the question is is which economic picture is actually the correct one? So you have the public equity markets that are an emotional tuning fork to what's going on with whoever is the marginal trader, independent of whether or not that's the value of all investors holding a security. That's the value attached to whoever is executing a trade at that moment, in contrast to the real asset area where it prices more off of the actual business activity, you know, are the properties that we own, are they still generating rent, are they still being occupied, then what's the deal about the value?

Just in the same instance the value of my house,

I have no idea what it is on a moment-by-moment basis. So

I -- and I tend not to worry about that, as long as it's

providing economic utility to me.

So we have that same challenge in trying to undo that. But I think it's the Barra system that we try to

have a picture, and we try to consolidate that into some kind of a view. And, yes, that can drive down all the way -- right down to an individual asset, or any aggregation of those assets that you'd care to think about.

CHAIRPERSON JONES: Okay. No further questions on that item.

So are you finished, Eric, on your presentation?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yes, sir.

CHAIRPERSON JONES: Okay. So we now will move
then to Item 8c, Asset Allocation Target Revision for

(Thereupon an overhead presentation was

Presented as follows.)

MANAGING INVESTMENT DIRECTOR BAGGESEN: Okay.

Eric Baggesen, Senior Investment Officer -- or, excuse me,

Managing Investment Director for Asset Allocation and

Investment Risk Management.

(Laughter.)

Funding Risk Mitigation Events.

MANAGING INVESTMENT DIRECTOR BAGGESEN: I'm joined by Paul Zhang who is an Investment Manager in the asset allocation team. And Paul has done a significant amount of work in relation to this agenda item. Just a couple of quick comments.

One is this is an information item and it is

linked to some of the policy changes that will be showing up in Agenda Item 9a, the Total Fund Policy. So there's no action being asked for this particular agenda item.

Action would be attached to that policy item.

The other is that this item is a part of the implementation path underlying the funding risk mitigation policy that the Board adopted in November of last year.

And I think with those comments, I would invite Paul to discuss the item.

INVESTMENT MANAGER ZHANG: Thank you, Eric. Good morning. Paul Zhang, CalPERS staff.

For this agenda item, staff recommends a systematic approach to revised asset allocation targets for funding risk mitigation events. As Eric just mentioned, in November last year, the CalPERS Board adopted a funding risk mitigation policy, which seeks to reduce the CalPERS funding risk over time.

And this policy also established the mechanism to reduce the discount rate when CalPERS investment returns significantly outperformed the discount rate. Also, as specified in the policy, the reduction of the discount rate and expected investment return will be followed by a revision of asset allocation targets.

So as a follow-up step to implement the funding risk mitigation policy, staff has developed a mechanism to

revise the allocation targets. To be consistent with the funding risk mitigation policy, staff recommends to establish a pre-defined mix of asset classes in order to take action in a timely and systematic manner.

So let's move to slide 6.

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INVESTMENT MANAGER ZHANG: Okay. In this slide, we have some information regarding how the asset allocation targets are revised for in funding risk mitigation events. In any given event, the allocation to public equity will be reduced which is offset by the increased allocation to fixed income. For example, the third column of the table indicates the allocation revision corresponding to accumulative reduction of expected investment return by 0.1 percent.

In this scenario, the allocation to public equity will be reduced by three percent, which is offset by the increased allocation to fixed income by the same amount.

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INVESTMENT MANAGER ZHANG: In the next slide, we have more information regarding the pre-defined mix of asset classes corresponding to different risk mitigation scenarios. In all scenarios, the expected volatility of the revised asset allocation targets are reduced.

Continue with the same example I just described, in the

highlighted column of the table indicating a 0.1 percent reduction of the expected return, the allocations to both public equity and fixed incomes are revised while the allocations to other assets remain the same.

As a result, the expected volatility of this revised policy portfolio is reduced by almost half a percent compared to the current interim asset allocation targets. So this concludes my remarks, and thank you for listening. And I'm happy to take any questions.

CHAIRPERSON JONES: Okay. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Just an observation. If the goal is to reduce the expected rate of return, and the correspondingly increased employer contributions, per employee contributions, and the unfunded lie -- the estimate of what the unfunded liability is, then this policy is absolutely spot on.

If the expectation is really to reduce the risk in the portfolio, then there are far cheaper ways of doing it than simply moving from public equity to fixed income. Make more work, and it's more complicated, and it leads to a whole bunch more discussion that, at some point, I still think we need to have.

But if the goal -- and if the goal is simply to, you know, reduce the expected return, this works just fine. If it's to reduce the risk, there are better ways

to doing it.

CHAIRPERSON JONES: Thank you. That was an observation. So we'll move on.

You want respond to that?

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah, I was going to suggest that I think that that -- in other words, on this particular agenda item we need to understand what are we going to do given an outcome that needs to be implemented in a very short-term time period? And -- but I do think that the point that Mr. Jelincic just made is a point, because all of these pre-definitions about what are we going to do to deal with a risk mitigation event are anticipated to be discussed when we do the actual asset allocation.

So I think that the comment and the exploration Mr. Jelincic of the point you just made would -- that would be the time and place that we could understand that, because we certainly -- if it is true that there is a cheaper more effective way of reducing risk, then shifting mean from equities to fixed income, it's not immediately evident to me what that is, and it certainly would, I think, warrant a full discussion at the asset allocation time point. And that's a discussion that we don't have time to deal with, given the sort of marginal change that would be attached to the risk mitigation event.

CHAIRPERSON JONES: Okay. Thank you. Okay. No further comments on that item.

We'll move to the next item, Update on Borrowed Liquidity Approach.

MANAGING INVESTMENT DIRECTOR BAGGESEN: You've got me once more.

(Laughter.)

MANAGING INVESTMENT DIRECTOR BAGGESEN: Eric Baggesen, Managing Investment Director, Asset Allocation and Risk Management.

On the borrowed liquidity, when the Board adopted the policy -- or I should say the interim target for the liquidity asset class in June of 2015, one of the elements of this was expanding the range to plus or minus three percent. And relative to a one percent target, that obviously implies that we could have a negative allocation to liquidity.

And that is simply a tool I think to potentially manage some of the -- the timing of when we would possibly be selling assets against a cash need. And that was also mentioned by Andrew Junkin from Wilshire Associates this morning.

At the time of the approval of the interim target for liquidity we said we would bring back an item that would give you some idea about the actual procedures to be

used to implement borrowed liquidity, and we gave you some examples at the time of approval as to how borrowed liquidity would actually be implemented as far as what would be the source of liquidity for the fund. And we're in essence having CalPERS lend money to itself.

Attached to this agenda item in Attachment 1 you've got a list of the high level guidelines as to how borrowed liquidity would be implemented. Those guidelines have affected a number of -- and been discussed with a number of parts of the organization and have been previewed and reviewed by the Chief Financial Officer. And you also have a sample report as to where any implementation of borrowed liquidity will show up in the reporting that is provided to you on a monthly basis.

And I think that the provision of these two items fulfill the promise that we made that we would bring this information to you before we would actually use borrowed liquidity. And we have not used it yet and we don't have any anticipation of doing it on a near-term basis.

But nonetheless, hopefully, this gives you some indication that, one, we've thought through the implementation of it, and, two, that you will see a report and you'll understand that you'd be able to see should that capability be implemented. And I'd ask if you have any questions?

1 CHAIRPERSON JONES: Yes, we do.

Mr. Jelincic.

Investment Committee be told.

COMMITTEE MEMBER JELINCIC: On the page of acronyms, I guess you called it the operating guidelines, but it looks like a page of acronyms. IPA is not defined anywhere in the policy -- in this and probably ought to be, especially if George Diehr is ever around.

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah. An IPA is the investment portfolio analytics team, which is part of Wylie Tollette's segment of the organization, but point well taken.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Okay. Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you.

This seems likely a very sensible approach. My only question is, there is a -- number 5 on this

Attachment 1 talks about reporting to the Investment

Strategy Group and the Enterprise Treasury Management

Team, but doesn't articulate whether the Board will be notified in any way. So just thinking about at what point should the Board be told or the committee be -- the

MANAGING INVESTMENT DIRECTOR BAGGESEN: Yeah, that's a very -- that's a very interesting point, Ms.

Mathur. And I think -- I mean, it's entirely possible

that the implementation of borrowed liquidity and the closing out of that position could happen even between Board meetings, because it's not intended to be a long-term source of leverage, if you will, to the fund.

But I think that certainly that can be a discussion that I would suggest our Chief Investment Officer and the Chair of the Investment Committee could have about what kind of framework and notification would be appropriate.

COMMITTEE MEMBER MATHUR: Yeah, I'm not sure, sitting here today, whether it needs to be an immediate notification or just a notification at the next Investment Committee meeting that, hey, we -- this was triggered.

But given that this is sort of a little bit new -- it took a lot of education for the Committee to even get comfortable with this concept, some kind of notification would be, I think, worthwhile.

MANAGING INVESTMENT DIRECTOR BAGGESEN: No, that's a good point. Thank you for making the comment.

CHAIRPERSON JONES: Good point. Okay. No further questions on this.

So we now -- I think it's -- the next item is a lengthy item, so I think this would be a good place to go break for lunch.

So we'll return at 1:15.

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              (Off record: 12:18 PM)
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              (Thereupon a lunch break was taken.)
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AFTERNOON SESSION

(On record: 1:15 PM)

CHAIRPERSON JONES: I'd like to reconvene the Investment Committee meeting. And we will move to Item 9a, Revision of Total Fund Investment Policy Including Divestment and Repeal of Legacy Policy, First Reading.

(Thereupon an overhead presentation was presented as follows.)

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you, Mr. Chairman. And I'm going to turn this -- the initial part of this agenda item over to Kit Crocker our Investment Director in investment compliance and operational risk.

Kit.

INVESTMENT DIRECTOR CROCKER: Thank you. Kit Crocker, Calpers Investment Office staff.

For this first reading, I will be giving an overview of the proposed updates to the new total fund investment policy, while Wylie will address in more detail the proposed revisions to the divestment section.

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INVESTMENT DIRECTOR CROCKER: These revisions, as this Committee knows, represent the culmination of a much larger endeavor over the past year to significantly overhaul our investment policies. Key objectives for this

project included establishing overarching guiding principles for policy development, creation of the new Total Fund Investment Policy, bringing the asset class policies into alignment with the new Total Fund Policy, removal of the duplicative, procedural, aspirational, and editorial language, and standardization of content format and style.

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INVESTMENT DIRECTOR CROCKER: The proposed revisions fall into three basic categories. There's new policy content, revisions to existing policy content, and general clean-up items.

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INVESTMENT DIRECTOR CROCKER: As detailed in the agenda item memo, the new policy content is driven primarily by the new funding risk mitigation policy. Whereas the revised text is generally intended to do three things, to conform to changes made to underlying policies during the recent program review cycle, to accommodate the merger of formerly stand-alone policies with cross-asset class implications, and to update the divestment section to incorporate loss and expense mitigation mechanisms.

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INVESTMENT DIRECTOR CROCKER: Once the Committee approves these changes, the next steps will be for an

approval of the affiliate policies, which are the next agenda item, and a transition to core Investment Office workload with ongoing Committee oversight for the policies going forward.

We also have the real assets update coming up later in the year as planned. With that, I will pause for any questions before turning the mic over to Wylie for a discussion of staff's proposed revisions to the divestment section.

CHAIRPERSON JONES: Okay. Yes, we have one question. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Since it's a first reading, I won't pick through it, but the -- when the appendix refers -- when the item refers to an appendix, which refers to another appendix, which refers to another appendix, it's not clear that we've actually helped clarify a whole bunch.

The other general observation is we've -- we have frequently changed will to shall. And it's not necessarily correct. I mean, shall is assigning a duty to someone, and so it can -- the -- what's the main noun. You got a verb and -- anyhow.

It's got to be a person. If you look at page six of 87, just because there's two. If you look at B, "Staff shall...". That's appropriate, because staff has the

ability and the authority to make a change. But then you get down later and it -- or, I'm sorry, just above that in A it says, "The asset allocation shall...", and that ought to be "will", because the asset allocation doesn't have the ability or the authority to do something.

INVESTMENT DIRECTOR CROCKER: That's a very good point. You know, we probably did a global search and replace. We'll go back and make sure those are appropriate.

COMMITTEE MEMBER JELINCIC: Okay. And in some of the new language you've got the same issue. So if you want to do a global, then you ought to use will, because will will work either way, but shall has a very specific mean. And the subject of the sentence has to be a person who has the authority to make a change.

INVESTMENT DIRECTOR CROCKER: Yes, understood.

We'll clean that up for the next reading.

COMMITTEE MEMBER JELINCIC: Thank you.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Any other questions for Kit?

CHAIRPERSON JONES: No, other questions.

Proceed.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Okay. Great. Thank you, Mr. Chairman.

Ted and I will be discussing some of the proposed

changes to the divestment policy we've included in this first reading for the Committee's consideration. Before I do that, I'd like to thank Forrest Grimes for his help as the chief cook and bottle washer on this policy revision project for the last 18 months. Great job, Forrest. And I predict the Board may be hearing your name again tomorrow in the Finance and Admin Committee.

The core of the divestment policy under consideration remains consistent with your past policies. Our Investment Beliefs advocate engagement rather than divestment as the best tool to drive change within companies. Engagement allows CalPERS to have a seat at the table as an owner.

Divestment removes our voice as an active and responsible owner, perhaps substituting an owner not as focused on corporate governance and our own principles. Additionally, there are significant real questions about the effectiveness of divestment as a tool. Modern portfolio theory and common sense indicate that divestment by definition reduces diversification.

The Committee will recall Wilshire's report from last October detailing the impact of CalPERS past divestment decisions. Overall, the portfolio has suffered losses of between four and eight billion dollars related to the stable of investment -- of divestment decisions

that exist.

Importantly, in January, your fiduciary counsel indicated that CalPERS needed to address the magnitude and materiality of losses related to divestment, both on an individual basis and collectively. To help address these issues, we've now included a loss mitigation approach in the divestment policy. This loss mitigation approach provides that any individual divestment, if it sustains a loss greater than 750 million for at least three years — in that case, staff would automatically reinvest to an index weight in the portfolio.

Similarly, for the existing divestments, we are marking their value as of July 1st, as of this year, should the proposed approach be approved by this Committee next month. And if those divestments, marked from July 1st of this year, create a loss for the fund of 2.5 billion or more for at least one year, staff would automatically begin reinvesting in the stable of divested securities.

In developing this proposed policy, we sought precedent and guidance around a standard for materiality in the context of our fiduciary responsibilities.

Consistent with what you heard from your counsel in January, there's actually very little guidance for public pension plans on what is material. The proposed loss

mitigation approach is one that we adapted from the Florida State fund, which uses a 50 basis point of the total fund threshold in their Iran divestment regulation.

Staff, in consultation with our General Counsel, concluded that the stated dollar amount -- dollar amounts, excuse me, was more reasonable, clear, and straightforward. However, the dollar amounts, as well as the one- and three-year time frames for consideration of those losses, are definitely a matter for the Committee's judgment, an area worthy of some discussion by this Board.

I'll pause and see if there's any questions on the proposed addition of a loss mitigation approach to the divestment policy, or any other questions related to the Total Fund Policy revisions.

CHAIRPERSON JONES: Okay. Mrs. Taylor.

COMMITTEE MEMBER TAYLOR: Wylie, thanks. I agree that we should be able to recover costs of unwinding when we're -- or if we're divesting of divestment costs and costs for the staff to analyze. My problem is with the current divestments, I have a bunch of questions. So if, for example, tobacco we know still makes money, right? How are you going to deal with the press if we decide that we're going to unwind that divestment? Because we've been out of that for, what, 10 years? Am I thinking that correctly at least?

So we've lost that money. That money is gone. And it's no different than when we were still invested in coal, all coal, and we lost quite a bit of money through 2000 and to -- all the way to now, right? So we lost quite a bit of money. We were still invested, but that money is gone.

So my question is how do we deal with something that would be as negatively perceived, I think, as reinvesting in tobacco, because of the health problems.

And we also provide health care, so we're hurting that as well. I mean, that could drive prices up for our health care.

And then secondly, I'm confused, and I wasn't around, but the Iran divestment, I thought that was something that we had to do? So maybe I'm wrong there, but I'm hearing a different story about that. So how do we get out of something we are required to do by the federal government? I see what you're saying with the State government. We usually can -- it sounds to me like with thermal coal when we divested -- or are divesting. We have not yet done so, but that we could talk to the State legislature at least on how we do that.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

I've heard a couple of questions, Ms. Taylor, in your question there.

COMMITTEE MEMBER TAYLOR: Yeah.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So I'll tackle perhaps one of the easier ones, and I'll hand the really tough ones to Ted.

(Laughter.)

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: The easy question is referring to any divestment or prohibition on investment coming from the federal government, there are companies that appear on the Treasury's what's called OFAC list the, Office of Foreign Assets Control. And we do not invest in OFAC securities. They essentially trump any type of policy that we or even the State of California might devise, because the federal government controls -- essentially outside of our borders, they make the rules.

COMMITTEE MEMBER TAYLOR: Right.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: And so we do comply with all OFAC restrictions. Our Iran and Sudan divestments relate to companies in other countries that are not on the OFAC list that might be doing business in Iran. That is legislatively motivated. And those divestments would potentially be included in the scope of the proposed lost -- loss mitigation approach we're talking about, because they are -- those are required, subject to our fiduciary responsibility.

So our fiduciary responsibility essentially is an element of those legislative mandates, and so that's what this loss mitigation approach is intended to ensure that we adhere to our fiduciary responsibilities, and the scope of materiality of what those divestments can do in the fund before we end up in a challenging area relative to our fiduciary goals and responsibilities.

COMMITTEE MEMBER TAYLOR: So are you saying a challenging area meaning too many divestments?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yes.

COMMITTEE MEMBER TAYLOR: Okay. Because right

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Too many divestments --

COMMITTEE MEMBER TAYLOR: -- \$8 million doesn't sound challenging. And like I said, tobacco is gone. So that's -- that loss is, I would say, probably been taken into account years ago, right?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Well, I would agree with you that we can't recover money that we've already lost. I think the way to think about divestment is it's an experiment. They have to -- they were originally done based on the precept that they either increased return or reduced risk. And when

they were done, no crystal balls existed, so we made decisions, and we want to make sure to give those decisions some time to work, but there comes a point where the loss experience and the evidence -- actual evidence of loss experience becomes overwhelming to the point where you can no longer basically ignore that loss. And the Board must make some type of decision relative to those types of divestments.

And with that, I'll turn it over to Ted for his comments related to your other part of the question, which is sort of the public perception and the issue that that reinvestment might create.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Very well articulated, Wylie. So on the communication plan, it's a very good point. I think we would anticipate when and if a reinvestment event occurred, you know, in the future that we would develop a communication plan with our communication team and with the Board at that point in time, because clearly communicating the rationale and the reason for the reinvestment will be just as important as when the original decisions were made and a communication plan was adopted for that original decision as well.

COMMITTEE MEMBER TAYLOR: So -- can you turn this back on?

CHAIRPERSON JONES: Yeah, just -- okay.

COMMITTEE MEMBER TAYLOR: So for something like, not necessarily Iran, because I get -- I didn't know the difference. But for something like the tobacco when we're looking at perhaps reinvesting in tobacco, are we going to take into consideration the health care costs of that?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Under this policy, no. Under this policy, we set a threshold monetary amount of \$750 million from an investment loss.

COMMITTEE MEMBER TAYLOR: Of loss per year.

CHIEF INVESTMENT OFFICER ELIOPOULOS: For a -- well, for a period of one year.

COMMITTEE MEMBER TAYLOR: But for the ones that are currently existing, it was 2.5 billion over three years, is that it?

CHIEF INVESTMENT OFFICER ELIOPOULOS: That's for the -- I'll give it a shot as well. So for any individual divestment, whether it's an old divestment or a new divestment, any individual divestment, so now think tobacco as an individual investment or Iran, Sudan as an individual divestment, or some new divestment in the future, for any of those individual divestments, there's a \$750 million loss threshold for that divestment to occur. And when that number is hit, that individual divestment under this proposed policy would automatically be reinvested in by the staff.

On a cumulative basis, at any point -- at any point in time, including the current stable of divestments, and all of them, and any new divestments that came into the portfolio, if the cumulative loss -- which might include losses and gains when you're talking about a portfolio of divestments, when the cumulative loss amount hits two and a half billion dollars, then the entire divested portfolio would be reinvested.

And as Wylie said, both on the individual divestment and the collective or cumulative divestment, it is all intended to address the issue that was discussed at the off-site in January, which is the divestment approach is an exception or -- is an exception to our general rule of our Investment Beliefs and of our modern portfolio theory construction. The theory tells us that it should not work.

Nevertheless, consistent with our fiduciary duty, there are occasions where this Board has made the decision that consistent with its fiduciary duties, a divestment should occur. What this policy hopes to address, as discussed in January, is should that divestment approach play out in the direction that was anticipated and hoped, in other words, that the system would enjoy less risk or more return by the divestment, then the divestment will stay within the portfolio.

But should experience be the opposite, and we incur losses, as our history of divestments have shown us, there must be some mechanism in place to address that cumulative -- that individual loss and cumulative loss that is consistent with the Board's fiduciary duty.

And our suggested approach to the Board is to set a limit ahead of time. And when that threshold is hit, then the reinvestment occurs, either on a individual or on a cumulative basis.

COMMITTEE MEMBER TAYLOR: So for my own thinking, I think this is broad strokes. I absolutely see the advantage to doing this, but I think if you're not taking -- if you're saying that as we've divested in separately out of all of these that we would reinvest because we hit a \$2.5 billion loss for the entire divestment, I think that's too broad a stroke, especially if you're staying that's inclusive of gains from some of the divestments.

So -- and also, if we're not taking into consideration the loss that occurs or the increase in expense that occurs in our health care portfolio for something like tobacco or coal, I don't think -- I think it's too broad. I think it's too sweeping. That's my opinion.

Thanks.

CHAIRPERSON JONES: Ms. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

First, I want to thank Wylie, you, and the team for working on these policy revisions. I think the upfront cost reimbursement provision probably could serve as a deterrent to save more legislatively directed divestment, so -- and it's something that I think really helps broaden awareness about our costs in terms of what divestment means.

I also appreciate the added transparency with respect to the annual comprehensive review and analysis of divestment activities. And frankly, the last time I think we had that last year, I was really surprised at how little attention it got. But I think the transparency around that is good.

Picking up on Ms. Taylor's concern, I have some concern about the stop-loss provision. And I'm wondering if a way to address it might be to actually have the issue of the reinvestment come back to the Board for consideration and action.

I appreciate what you're trying to do in terms of minimizing our -- having to put our hands on a lot of divestment related decisions. On the other hand, reinvesting in some of these areas are -- raises significant policy concerns that aren't necessarily

readily apparent in an investment context. And I think it would be worthy of those instances to come back before the Board for Board action. So that would be kind of a suggested maybe amendment to the policy change. And I think it just would warrant, and hopefully invite, just broader vetting of the proposal at that time.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you, Controller Yee. An option to -- or something to be aware of is that if and when we get near those thresholds, you would -- that would be reported back to you at least annually. So we will -- you'll have a -- we'll have a good sense of where we stand relative to the proposed individual and cumulative limits.

And there's a seasoning period that I mentioned, sort of the one-year and the three-year seasoning period where that loss would have to be sustained for some period of time. It's not a momentary loss. It's something that would season. And if it remains, we would come back to you and say we are planning a reinvestment activity consistent with the policy.

So when we do that, you would have the opportunity to then take direct action or change the policy to direct staff to refrain from reinvesting. So that's an option that you would retain, even with the policy as written.

COMMITTEE MEMBER YEE: Okay. You may want to say it more explicit. But practically speaking, we're -- under this proposed change, this is just the tobacco divestment that is really at issue.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Practically, in terms of the current stable of divestments, yes. That's practically speaking the only one of the current divestments that's likely to, you know, get anywhere near this.

COMMITTEE MEMBER YEE: To reach it, right.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Based on recent history that -- in Wilshire's report from last October, the tobacco divestment has cost the fund somewhere between 100 and 200 million dollars a year.

COMMITTEE MEMBER YEE: Okay. Great. Thank you.

CHAIRPERSON JONES: Okay. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Well, surprisingly, I've got a number of comments. The cost recovery up front, I strongly support that. Every divestment issue that's come up, I've always asked can we recover our costs, can we get them to pay for the costs? So clearly, I'm supportive of that.

I am generally opposed to divestment. The only divestment I've ever voted for was firearms, and that was

quite frankly because the Treasurer was going to keep bringing it back and back, and we would spend more money researching it, and analyzing it, and arguing about it than we would -- than we had invested. So it was a cost decision to eliminate it.

The tobacco continues to cost us money. The tobacco stocks continue to do well. And, in fact, they're not in the portfolio. So I think that's something we need to think about. The issue of the impact on the health side, I think we really need to be very careful there. They are two separate trusts. And the -- to have this trust serve the purpose of this trust is a very, very slippery slope, because we may wind up going the other way and saying, you know, the little trust fund we have for long-term care ought to be able to invade the PERF. So I really think we need to recognize they're very different trusts.

The -- the size issue I think needs some more discussion and development. I actually would be opposed to saying if we hit that trigger, we're out. I think I would be much more supportive of a proposal that says if we hit that trigger point, we are out, unless the Board takes an affirmative action to say we are still in.

So the default is we're out, and we cannot get our hands dirty by saying well it's the policy. But there

may be a situation where we're actually willing to accept that cost because we think that other values trump just the pure dollars. So I don't think it ought to be an automatic that we go out.

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I've only been around for 30 years, so I've got to say I don't remember a divestment that we've ever done to reduce risk or to increase the cost. That's not to say it hasn't happened, but -- and then I'm not a great believer in cap-weighted indexes anyhow. So there may be times where we want to get out for investment reasons. But if we're getting out for an investment reason, that's really not a divestment.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: That's right.

COMMITTEE MEMBER JELINCIC: So I think it's a good conversation. We need to have some more discussion about it. And there was one -- because I can't help myself, on page 20 of 67, the new paragraph, the -- there needs to be a period after investment performance, four lines from the bottom, and then a capital T.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
Thank you.

COMMITTEE MEMBER JELINCIC: Thank you.

CHAIRPERSON JONES: Okay. Mr. Slaton.

VICE CHAIRPERSON SLATON: Thank you, Mr. Chair,

and thank you for coming forward with this very thorny issue. This is one of the -- I think the tougher issues that we face as an institution. I find myself -- although I did vote against the firearm divestment, I do find mostly I'm agreeing with J.J. on the issues that he's raised. For the life of me, I can't figure out how divesting from tobacco decreased someone's urge to take up smoking. But, you know, maybe there is some connection. I certainly can't find it myself.

So most of the divestments, and I think this is what J.J. was pointing out, are effectively social divestments -- social or political divestments. Because if it's financial, it's going to come from you primarily. That's -- you're the driver for making these financial decisions for investing this portfolio.

So if they're social, then -- and political, then I think we need to be honest with ourselves about what's going on. If we choose to reduce our returns in order to achieve a social result, sobeit, but I have trouble with meeting a fiduciary responsibility and doing that at the same time.

I don't understand the connection on the cumulative side -- the cumulative side of this. Because the way I read this, if we hit the cumulative, we would reinvest in everything we have divested from, regardless

of whether it went up or down. So to me that's a -there's a disconnect in trying to do the cumulative
approach.

I also have difficulty with it being -- well, I'd mentioned to you earlier about the one year, you know. I thought we don't look at things on a one-year basis. We tend to look long term, so why would we set a policy here that was looking very short term at a change which could happen just based on some anomaly in the marketplace that moved it.

The last issue I have is it being a dollar amount. And I didn't quite understand from an earlier conversation where -- how come we can't do it on a basis point movement, so that if our fund has moved X, and this divestment has moved Y, then if it has moved enough more over a period of time than we've moved, then it seems to me then it would be a candidate for reinvesting. So can you address that subject?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

I'll take a first crack at those, Mr. Slaton. So the dollar amounts as well as the calculation approach of materiality is certainly a subject for the Board's consideration and discussion. As I mentioned, there does not appear to be a great deal of precedence or guidance around exactly this topic. As I said, Florida -- the

State of Florida uses a 50-basis point threshold in their Iran divestment regulation. That's where they came to basically determine that if they suffered a loss of that magnitude, they would automatically reinvest, and -- however, that is a much smaller amount than what we're proposing here, both in relative terms and absolute terms.

So I think the concern that we came to with using a basis point threshold with this fund is with any growth at all in this fund, you're talking about some very large dollar amounts. And the basic concept underneath -- underlying your fiduciary responsibility is that your fiduciary responsibility requires basically you to focus on three goals exclusively, payment of benefits, reducing contribution rate, and defraying expenses.

If it's not one of those three things, it's -- and we're making investment choices that don't pertain to those three things, it essentially comes under question. It comes under examination. The allowable exclusion from that has been materiality, right?

VICE CHAIRPERSON SLATON: Correct.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So if we're going to rely on materiality, we have to come to some definition of materiality. And frankly, we struggled with that. I think that's a good subject for the Board to discuss. Is 750 the right number? Is it a billion? Is

it 1.5? What is material to the CalPERS fund?

We certainly don't have the sort of sole prescription for that. I think we just have ideas that really bear some discussion and some consideration. So a basis point threshold, if you'd prefer to move to that type of materiality, that's certainly an option. It's just the risk is that as the fund grows, that number will continue to grow as well. And then the absolute dollar amounts that we're talking about get larger and larger, obviously.

VICE CHAIRPERSON SLATON: So didn't we -- when we did firearms, we looked at a dollar amount in terms of materiality, if I recall, is that correct?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I confess, I wasn't here during the firearms debate, so I may have to call on someone that was.

VICE CHAIRPERSON SLATON: I think it was the size of the -- dollar size of the investment. Was it that or was it a percentage of the portfolio?

CHIEF INVESTMENT OFFICER ELIOPOULOS: Again, two different people here than were there at that time, so I don't -- I don't -- what I recall is we really looked at it in terms of the dollar size of the portfolio and its effect on the volatility of the fund.

VICE CHAIRPERSON SLATON: I see heads shaking

behind you, so I think that's accurate.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I think to your other question around gains and losses, we have -- we would continue to rely on Wilshire as our -- essentially our calculation agent for the determination of gains and losses. They've -- they did a great job in October, and we would ask them to continue to do that. Basically, providing an independent perspective on the gains and losses of different divestments.

And should a particular divestment continue to generate gains for the portfolio, as your emerging market principles have actually generated gains, they're one of the divestment activities that has actually generated gains for the portfolio, staff, in consultation with Wilshire, would have the option of continuing that should we believe it still makes sense, in terms of risk and return.

So that would take it out of the realm of divestment, and take it into the realm of investment decision making.

VICE CHAIRPERSON SLATON: But why would it be part of this cumulative policy then. It seems like you'd only do losses in a cumulative policy, not gains.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: But it still would need to be considered because the -- we

would want to look at all of the divestments as a sum total, but we could come forward with a reinvestment that would exclude certain things that we felt were reasonable to expect going forward.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think if I could -- there are -- there are definitely a few areas in here that are judgment calls. And having a 13-member board, one of the geniuses of the Constitution is it takes into account, on these judgment calls, you want a wide variety of opinions making judgments on behalf of Calpers as the System.

VICE CHAIRPERSON SLATON: And I think you have them here, by the way.

(Laughter.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: We have them here. I'm looking at them. They're right here. And I think -- I do think you need to talk about 750 million and two and a half billion, that's one judgment call, and come to an agreement, come to a consensus, come to a vote eventually on what those numbers should be. We can always translate those into basis points, if you'd like them to fluctuate.

The one thing that Wylie didn't mention, and we -- is that there is some simplicity in calculation to having a fixed number, and, you know, the methodology.

And I think it would probably be good to probably hear from your consultants at some point as well on this whole process.

But one of the pieces of it is calculating it and making sure its clear and understood. And I think you all, like the public, will remember dollar numbers and thresholds more than you'll be able to translate the basis points into dollar amounts. So we've built into the policy that those dollar thresholds would get reviewed every year. So you'd have a way of looking at them, and determining whether or not they're there.

On the two and a half -- on the cumulative, that is another judgment call for the Board. And I hear the questions in terms of should you include the ones that might have gains? Why throw out the gains without -- the baby with the bath water? And that's certainly a judgment call for the Committee to make.

Our thesis on the cumulative, at a number like two and a half billion dollars, is the cumulative evidence of our collective ability to make a good judgment around divestment, has reached a point where we think that the experiment should be ended. There has to be some dollar threshold number that the System comes to terms with the fact that consistent with theory, the practice of the divestment is not working, and therefore you'd reinvest

the whole.

But I certainly think, within the realm of judgment, you could exclude the positive performing from the -- from the negative performing. That's certainly a judgment call by this Committee.

VICE CHAIRPERSON SLATON: So I have one last comment about this. It just -- it seems to me there's one big dog in the room and it's tobacco, and it overshadows all of the others. So I'm trying to wrap my head around the logic of if it reaches 2.3 or -- 2.5? Is that the -- 2.5, then suddenly we're back into firearms, and -- you know, when the driver was losses in tobacco.

And so I'm trying to find how coherent is that as a policy for us to do that.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Practically speaking, Mr. Slaton -- I think practically speaking, the tobacco is, in fact, the big dog in the room. And it -- the -- it's much more likely that the tobacco would hit the 750 million individual --

VICE CHAIRPERSON SLATON: And then we'd never get to the two and a half.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

-- and we'd never get to the 2.5 as it -- but again, that's -- those dollars amounts are all subject to your input and debate. So practically speaking, the 750

is a much -- is much more likely to be triggered at the tobacco only component.

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VICE CHAIRPERSON SLATON: Well, I hope there's a second reading, because I'm sure I'll have some more questions.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

There is. This is a first reading, absolutely.

VICE CHAIRPERSON SLATON: Thank you.

CHAIRPERSON JONES: Okay. Mr. Costigan.

COMMITTEE MEMBER COSTIGAN: Thank you, Mr. Jones.

All right. I'm going to try and keep all my notes straight. So I just wanted to understand first, on the divestment loss threshold, it's 750 million and 2.5 billion, so both tests have to be met?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: No, it's 750 million for any individual divestment, for example, tobacco, firearms, Iran/Sudan.

COMMITTEE MEMBER COSTIGAN: Okay. Well, I'm just saying under your definitions, it's, "Divestment loss threshold shall mean 750 million with reference to any single divestment initiative, and 2.5 billion cumulative with reference to the existing universe". So it's A plus B equals C, that's what the --

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
No, no.

COMMITTEE MEMBER COSTIGAN: Then you need to -- I'm reading it that way.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I'm glad that you're reading it that way, because that tells us we need to rework the language --

COMMITTEE MEMBER COSTIGAN: Well, that's how I read a statute.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

-- so that it's more clear. To be clear, it's 750 million considering any individual divestment, as I mentioned tobacco or firearms, and then 2.5 billion in consideration of the entire stable of divestments. They are two separate loss thresholds. They are not -- there's really -- they have very little interaction with one another.

COMMITTEE MEMBER COSTIGAN: Well, then either you might want to break up the definition, because that's -- so it's and. I mean, I'm just reading it. So here's what I sort of struggle with -- so first of all, let's back up. On policy cost, and looking over at Doug, because it's his folks, on legislation, there is the routine cost when you do a bill analysis for what staff has to -- what's in the normal course of Wylie's job as Wylie.

So when we talk about the reimbursement of cost, where is a further definition -- you've got, "Decisions

made pursuant shall include requests for upfront reimbursement costs, one-time implementation trading cost, staff analysis". How are we going to separate out -- so there's an additional cost that we peg on divestment from just normal work -- just for staff work.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

In some cases -- yes. In some cases, yes. For example, if we were to consider a particular activity that takes place within a corporate -- you know, a corporation, let's say the use of peanut oil in french fryers, and someone decides that that is something that we want to divest from, we would have to employ and engage with someone who would do the research for us to figure that out and figure out how many companies use peanut oil in their french fryers that might cause heart disease. That is going -- that's a real expense that we would incur to just figure out what the list of companies might be.

That's the type of expense that I'm encouraged to cover in this additional request for upfront reimbursement. However, I would add that, as you mentioned Mr. Costigan, analysis of legislate -- the impact of legislation is a typical and understood part of our role in the Investment Office. In other words, we understand that part of our job is, in fact, to analyze the impact of legislation.

So there is a standard amount of our work that is associated with that. This is in relation to special expenses that particular divestment bills might require.

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COMMITTEE MEMBER COSTIGAN: Well, I agree that we should seek reimbursement costs, because it is a little to easy to say divest without understanding the other costs that are actually bore by the member, because not only do you potentially lose the opportunity cost of increases, there's the cost in getting out, and someone needs to account for that.

The question sort of back to Mr. Slaton's question on guns, it was a small amount with inside the portfolio was the amount of staff time. There was the political optics of it, and then there was the amount of time. But this cost would apply both to public and private. So anytime, anywhere across the portfolio we would seek costs.

The other is sort of what Mr. Jelincic said, I just want to -- it's a trigger to go back in, because I think Mr. Jelincic was saying a trigger to get out. And I may not understand investments the same way, but once we hit the 750, it actually would be an automatic trigger to go back into that investment, is that correct?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
Yes, that's correct.

COMMITTEE MEMBER COSTIGAN: Okay. And so -- and then back to Mr. Slaton's, here's the struggle that I have, and I think Ms. Taylor raised it as well on tobacco. Its policymakers versus fiduciaries. And that's what I struggle with, as a fiduciary, our goal is to get the highest rate of return in order to pay the benefit to our members, which may put us at odds with policymakers who see things different, like tobacco, coal, guns. And that is the struggle -- I mean, even when we look at Health Committee and the position we take on pharmaceuticals and generic drugs all have an -- and I raised -- one of the first questions when I got on this Board is how do you meet your fiduciary on Monday and still meet your fiduciary obligation on Tuesdays when you have health committee. And it's this yin and yang.

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The argument I make, and why I think this is actually a good policy, let the policymakers, those in the legislature make the decisions as to what the policy for the State should be. When it comes to tobacco, I understand on Tuesday our health care costs go up, but on Monday, when we're sitting here in Investment Committee, the goal is to try to get the high rate of return. We heard on private equity the trailing on costs today.

The question is how do we bridge that? I think an automatic trigger, and I do think it -- coming back, I

think at some point what is you go in and at least inform the Board, but the question is -- we've left money on the table, and so then the question is how do we, again when we're struggling to make seven and a half percent and seven and a quarter percent.

The other just generic question I have is, is three years too long? Are we -- as when we heard from our economist today, if this is all cyclical, if we're waiting three years, are we buying at the top end of something when we're going back in? I mean, how do you gauge for that? Because what we're doing is waiting on a wave, and so that wave has already gotten 750 million, and now we're coming in, are we near the beach or are we still out at the ocean?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yeah, that's a great question. And as I said, the time frames here are up for discussion and debate. Anytime we reinvest, it's important to note that there's absolutely no guarantee that those reinvestments are going to actually continue to make money for the fund. It's just an acknowledgement that we took an active position away from an index, based on a divestment decision. And that active position away from an index has cost us a certain amount, and we're reinvesting back to index weight. That's essentially what the loss mitigation

approach is proposing.

COMMITTEE MEMBER COSTIGAN: And last question is, this does not allow us to go back into an investment where we are strictly prohibited from going into?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: No, that's right.

COMMITTEE MEMBER COSTIGAN: Thank you.

CHAIRPERSON JONES: Okay. Mr. Lind.

GOMMITTEE MEMBER LIND: Thank you. So I'm generally supportive of where we're trying to go here. You know, the -- there are institutional investors that are making money on the tobacco stocks that we used to own, right? That's -- you know, that's the reality of divesting. I had some of the same concerns that the Controller raised about why this doesn't become a Board decision. But I like the response that Wylie gave about the process, and we would get notified ahead of time that this was going to happen, but it would take an affirmative action of the Board to stop the train, so to speak, not unlike we did with the Risk Mitigation Policy, right, similar sort of process?

And maybe that needs to be baked into the policy a little more clearly, so we know we would still have that option, but it would take an affirmative action of the Board. I don't think I'd be comfortable with you coming

to us, okay, we're here, yes or no. I think the way you describe it, Wylie, makes sense to me.

And then I get the whole -- the difference between the threshold for individual investments versus the whole universe, but I'm not sure why we need to do the latter, why we wouldn't just do this on the individual? You know, whether it's tobacco or firearms or whatever, why we want to have this sort of universal number? So -- and that could be part of the whole discussion about what numbers do we have and what are the time periods and so on, right? So I do want to hear the thought on that.

But let me just ask my third question, then I -so some of the legislatively-mandated divestments -- you
know, we've seen in the past certain members of the
legislature still have ownership of -- or feel ownership
or feel very strongly about them. And have we sort of
vetted with some of those folks or do we plan to do that
as we get to the second and third reading, in case it's
not on their radar, so we don't have -- you know, I don't
have some Assembly Member calling me -- remember, I was
appointed by the Assembly and the Senate -- saying you
guys did what, right? So is there going to be a little
vetting process with some of those folks?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: All good questions and comments. The cumulative versus

individual one I'll pick up on first and try to address that. That -- we included both essentially at specific -- specifically to address the comments from your fiduciary counsel in January that you needed both. And that was partially because, if you think about only having an individual, if you set that at \$750 million say over the course of three years, which is what the current policy dictates, that still leaves a lot of room for individual divestments. We could have a divestment bill every month and not hit that threshold if they were small, and your staff would spend much of its time dealing with small divestment bills.

And so to address that issue, that you could -you could take an individual divestment desire, and
subdivide it into a variety of small pieces, so that it
would come beneath this threshold. And as I said, those
could come over and over and over. And I have a feeling
that's not the intended investment approach for this
Committee.

That we felt it was important to have cumulative element in this, so that you could capture those -- you could essentially try to prohibit or restrict the freedom to create lots of subdivided divestment activities that would never hit the 750 individual limit, but might begin to trigger something more broadly. That's why that was

put in there.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I would just add the way we talked about it in January is when do -- when does a de minimis or several de minimis actions become maximus? And the direction was you need to -- you need to have a cumulative number to address that risk.

I think on the legislative front, we'll certainly look for Committee direction on that, but it's something that we could work with our Legislative Affairs group. Certainly, this is a public hearing and open to the public, and it might be commented on, but we could do something more affirmative working with our Legislative Affairs Director, if that's the Committee's desire.

CHAIRPERSON JONES: Okay. Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you. A lot has been said on this proposal. Let me just start by saying that, as a general rule, I am definitely a proponent of engagement as opposed to divestment. I think it's a much more effective strategy. We have shown that that is something we are good at, and have had a lot of success with, both in terms of achieving various policy goals, but also in terms of achieving better outcomes from a performance -- risk-adjusted performance perspective, so I -- and I also want to say how much I respect and appreciate that you all have brought this very

challenging, somewhat emotional issue to us, because obviously none of us wants to invest in -- affirmatively invest in tobacco. That's kind of an unpleasant thing to do, but -- and yet, we're not divesting from everything that we might object to from a personal standpoint in our portfolio.

We can't do that, because then we would have a tiny, tiny portfolio that would not achieve our overarching fiduciary goal. So I totally get what this is for, and generally think it's the right thing to do. I do have a few questions and/or comments.

One is on page 20 of 67, it starts out by talking about we will only take risk where we have a strong belief we'll be rewarded for it, which is one of our Investment Beliefs.

And then further down in the -- in -- sorry, this is in the second big -- the second paragraph under purpose. I think it's the fifth or six line up, it starts with, "While -- sorry. Sorry. The fourth line up it says, "...the Board's fiduciary obligation forbid CalPERS, in the management of its portfolios, from sacrificing potential investment performance or diversification for the purpose of achieving ancillary goals".

And I think what's missing in that sentence somehow is risk, because we can sacrifice potential

performance if we think we are mitigating a risk. Not to achieve ancillary goals, I totally agree with that, but I think somehow it's -- there's something -- it's just -- it's just missing there somehow. It just sounds a little too harsh maybe, that we would -- because we don't always pursue anything that might perform higher, because we might be worried that we would have some losses down the road, right? So -- and in some cases, you could see a divestment initiative.

And I grant you that maybe they haven't generally been driven this way, but you could envision a divestment issue where you might say I think that the risk of this particular segment of the investment universe has such significant potential risk that we want to get out of it today.

Now, maybe that's what you would call an investment decision as opposed to a divestment decision. And maybe I'm just talking in circles here, but I just make that point, and just think -- I don't have an answer to what the right language is, and maybe I need to think a little bit more about that. But I just think there's a few words missing in that sentence.

Okay. Moving on to the next page under the top paragraph, it talks about CalPERS experience to date, which seems like a very this-moment-in-time statement.

don't know. It doesn't -- it seems like that would get -- become dated at some point potentially. So I just -- just raise that. It's really just words, I suppose, but --

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

That's fair.

COMMITTEE MEMBER MATHUR: -- just raise that.

Maybe it's not necessary to have that in there. And then talking about the annual -- I need a little help with respect to the divestment loss mitigation approach, and the second paragraph. This is on page 23 of 67, the second paragraph talks about a divestment loss threshold for a period of one year or longer, three years or longer for new divestment initiatives.

So let me make sure I'm -- I'm not sure I'm completely understanding the language, so I just want to make sure I do, that if it's something new post whatever date we might approve this policy, then we would look at it for three years. And if it hits the \$750 million threshold within those three years, then -- or after those three years.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: It might be easier to think of it as a seasoning period for the loss. So it's not if it just hits it -- you can think of it this way that once we've achieved a \$750 million loss on any particular divestment, it essentially starts a

clock. And three years later, if we are still suffering a loss of \$750 million or greater, that would trigger the reinvestment.

The idea is we wouldn't want to trigger reinvestment for momentary fluctuations in the price.

COMMITTEE MEMBER MATHUR: Right.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: It would want to be a sustained evidence that this divestment experiment -- that particular one is not working.

COMMITTEE MEMBER MATHUR: Is harming the portfolio.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Is harming the portfolio.

COMMITTEE MEMBER MATHUR: Yeah.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So seasoning is kind of the idea for both the one-year and the three-year divestment proposals.

COMMITTEE MEMBER MATHUR: Okay. And then the one year is for those that we have already in place, that if after a year following the adoption of this -- or the -- following it hitting the 750 million -- no.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

You're close. Sorry. It is a confusing -- it was confusing. It's easy if you put it in a spread sheet. It's difficult to put it in English. If your Committee

approves this policy next month, then effective July 1st of this year, we would essentially mark the divestments -- that market value of the divestments that we have made versus the market value of those divestments in the indices in which they are represented, and we would then start that clock.

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And if, after that one year, we have accumulated a loss of 250 million -- 2.5 billion, excuse me, for -- COMMITTEE MEMBER MATHUR: For the entire, for all of them.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

-- for the entire, for all of them, we would then reinvest.

COMMITTEE MEMBER MATHUR: So the 750 million only applies for that three-year period, not for this annual, this one-year period?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

That's right for the -- that's a three-year measurement.

COMMITTEE MEMBER MATHUR: So I think my questioning really amplifies that this language is extremely unclear, and that -- and perhaps a visual would be --

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
Perhaps an example.

COMMITTEE MEMBER MATHUR: -- of -- perhaps an example, but -- perhaps an example, but there's definitely some need to clarify this language.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
Very helpful.

definitely still struggling with this one year, three year thing. One year, as a general rule, feels too short, but obviously some of these have been in place for a long time, so maybe there's a -- so I don't -- but I -- it feels -- it doesn't feel like a long-term experience, right, which is -- or a long-term horizon, which is generally what we're trying to focus on. Even three years, is that the right number? I don't know.

It's longer than one year -(Laughter.)

COMMITTEE MEMBER MATHUR: -- but is it long? I don't know. Is it enough time to really determine whether it's additive or subtractive to the portfolio? It's just a question. I don't know the -- I don't know the answer. I know this is something you guys have been struggling with.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: We have truly been struggling with exactly that topic. We're welcome to hear other thoughts on it, but a possibility

might be three and five. That's something that we discussed internally too, to essentially increase those seasoning periods so that it was very clear.

The offset to that, the thing that the Committee would need to balance is that in that time period, you're -- you know, based on past experience, you're likely to be losing money.

COMMITTEE MEMBER MATHUR: Yeah.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: So it extends that period of loss. But if you extended the time period without increasing the dollars amounts, that's a possibility. That's a way of theoretically, you know, partially -- at least partially limiting your losses.

COMMITTEE MEMBER MATHUR: Yeah, I see that. With respect to the specific issue of tobacco, which has been raised several times, and obviously it kind of hurts to have to think about reinvesting in tobacco, I do -- I do totally appreciate and understand that our health trust is a separate trust from our investment -- our PERF, and we absolutely should not be mixing the two, even though we where these hats and we -- you know, it's hard -- it's hard to separate.

But I do think that perhaps on the health side, we could think about are there activities we want to undertake to help -- to mitigate the -- you know, the

health implications of tobacco that are -- and I think we already had some -- and we actually already had some initiatives under the health program.

So anyway, I just say that there might be other approaches that are more engagement type strategies we could take around tobacco that we should consider on the health plan side.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: I think that's right. And you could consider those whether you choose to reinvest or not.

COMMITTEE MEMBER MATHUR: Either way, yeah, absolutely. And I think we have in the past, but there might be other things that we can undertake.

I had one other thing that has nothing to do with divestment, but has to do with the total fund investment policy. And that is with respect to manager expectations, which I know we been piloting. At some point, is there a plan to incorporate an affirmative responsibility for developing and -- manager expectations and holding our managers accountable to those into -- incorporating that into our investment policy?

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think the first step is to see how this pilot, the one-year pilot -- and certainly that would be a good topic for discussion at the end of the pilot period, what was our experience, how

comfortable are we replacing it in policy, what would it be?

COMMITTEE MEMBER MATHUR: Okay.

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CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: And they might also influence the principles, the global governance principles. So it might end up here, it might end up there.

COMMITTEE MEMBER MATHUR: Yeah, fair enough. So I would -- so when the pilot is over, I think you're going to bring something back to us. That could be --

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
That's right.

COMMITTEE MEMBER MATHUR: That would be great to have that part of that conversation. Thank you.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
Thank you.

CHAIRPERSON JONES: Thank you. A lot has been said, and I see we have requests to go for a couple more rounds of questions, so -- and then we do want to ask Wilshire and PCA to make comments, but I'm going to try to take one pass myself on this. I think what I heard the -- a couple of things that there seems to be some consensus around, and that was to seek reimbursement. I don't think there's an issue. So you mentioned that you needed direction, so that -- that is pretty clear.

The -- using a percentage of basis point versus a dollar amount I think can become confusing, because you're saying 100 basis points, and then you've got to go find the dollar amount to do the calculations, and so -- and it's going to be different. So I would favor a dollar amount. Now, I'm open to whether that dollar amount is 750 or 2.5 billion. That's open for me, but I think I would suggest that it be a hard dollar amount for transparency purposes.

The other thing is that the concept of coming back to the Board for -- or the Committee for a decision, and I think you laid it out pretty clearly, that we will have the opportunity to make that call. So I -- I'm fine with that process where you would be coming back before the decision is made, is that what I heard correctly?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

That's what we would propose is that although the policy would authorize staff to automatically reinvest should we hit the time period and the dollar amount, before we did that, we would come back with an information item to let you know that we were -- that that looked like a possibility.

CHAIRPERSON JONES: But that information item still would be under the purview of the Board making a decision not to go forward.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Absolutely. That's right. You could always move it into an action item and -- or change -- prohibit staff from reinvesting.

CHAIRPERSON JONES: That's where Ron and Priya and a couple others have indicated. So I think -- unless otherwise, I think that's we're consistent in moving forward on that one. I had another comment on a place in here. Let's see where it is now. It's the iPad 714. I think that's where it was. Yeah, that's where. And it's at iPad 714. It's page four of eight. And it's taking about the Board driven divestment mandates.

And on item 4, it talks to fiduciary duty analysis by the Legal Office. My view is that should be done by the fiduciary counsel of the Board.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yes, that's accurate. I think the direction should be received a divestment -- receive a divestment direction. We would approach the Legal Office, at which point the Legal Office would engage your fiduciary counsel and the -- and you -- your Committee would receive the direction and opinion from your fiduciary counsel directly.

CHAIRPERSON JONES: Right. Yeah, I can understand our Legal Office being the gatekeeper of

information, but the --

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

That's right, but you'd receive the opinion directly from your fiduciary counsel. That's right.

CHAIRPERSON JONES: Right, right. Okay. And you addressed the communication plan and a number of Committee members raised the concern about how we communicate, so you responded to that issue.

And the other comments by Priya about some language clarification, a number of Committee members made some comments about some language needs to be revised, et cetera, so that it's clear. So I'm not going to try to re-comment on all of them, but leave it to you to -- you heard what they had to say.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Message heard around -- and I agree, I think we have some work to do to try to make that more clear.

CHAIRPERSON JONES: Okay. Okay. And also Priya's comment about engagement. We -- don't we engage with all these companies before we hit that point of discussions about divestment?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Certainly in the engagement bills that I've been exposed to in my two years, yes, definitely, it's part of the process.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think
Priya's point is upon reinvestment. Now, that we have
this policy that we've been out of these -- tobacco or
otherwise, at that point, that we are reinvesting, I think
part of our communication plan certainly, or otherwise, I
think we need to plan an engagement strategy to address
the concerns at that point in time.

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So I think we'll take a look whether or not either in the -- you know, referring to the communication plan, I don't think that quite does it now that I hear myself say it. I think we need to put something that engagement will be -- an engagement plan will be developed.

CHAIRPERSON JONES: And what I also didn't hear was a consensus around the timeline. The -- I heard several comments, but I didn't sense there was a consensus. So maybe we need to have further discussion, because some members talk about three and five, some say one and two -- one and three rather. So I didn't -- unless someone else heard a consensus around a timeline, that's still out there for us to -- maybe that's an option that you bring back to us when you bring the policy back to give us an option to focus on in that area.

We clarified the health issue, right?

So, okay, that's my comments. We'll go another

round, okay?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Great. Thank you, Mr. Chairman.

CHAIRPERSON JONES: Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: In terms of the analysis issue that Richard raised, you know, sometimes the legislature is thinking up this crazy bill and says we want you to do the analysis, which is different than analyzing a Bill. And so I think when you look at the cost, I think you need to consider that.

The \$750 million number is problematic. And if you look at firearms, the whole portfolio was 500 million, so there's no way you lose \$750 million by getting out of a \$500 million investment. Now, it may make the Treasurer happy that we'll never have to readdress that, but there is some problem with the number. I haven't got the answer, but there is a problem.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: Are you -- Mr. Jelincic, are you indicating that you think the number is too large, that 750 is too large, or is it --

COMMITTEE MEMBER JELINCIC: Yeah, I think it's probably too large. And it may be necessary to adjust it depending on what you're divesting. You know, if you're divesting thermal coal, which is a very small part of the portfolio, then, at some -- at what point do you say

that's different?

It's very different than if you say we're not going to -- we're looking at tobacco. I mean, they're just different magnitudes, and I'm not sure what the solution is.

I would be supportive of a number. And I'll point out that a billion dollars like we lost on LandSource is only 33 basis points, but it's hard to say a billion dollars is not material.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
That's exactly the challenge.

COMMITTEE MEMBER JELINCIC: And so I think that we do need a number. Again, I'm not sure that we've got the numbers right. Just in defense of tobacco, I will point out that it provided a significant number of good union jobs.

There -- you've said that you will warn us before we get to the 750, but that's not in the policy, and I think it should be spelled out in the policy. And then the other thing I was going to make was a suggestion to Chair, who just left, so I'll make it to the Vice Chair, that we should actually schedule this for the second reading, not as an action item, but plan on at least a third, because this policy is going to have some significant changes when it comes back, and I think needs

to be rediscussed, and needs to give us more time to actually think about.

So I would just recommend that it not -- the second reading not be intended as an action item. And those were my points.

VICE CHAIRPERSON SLATON: Okay. Did you have a --

MR. JUNKIN: I just had one technical point to make regarding firearms and the size of the divestment. Think of the loss from divestment as underperformance versus the full portfolio. So even though the divestment may be 500 million, you can lose 750. If firearms just stayed there and the market doubles, for example, you would lose \$500 million. If it happens again, you can see how you get to a \$750 million loss. So I just wanted it to be real clear that while there -- I think it's important that you do have a discussion about the size of the divestment. It is possible that in this construct to lose an unlimited amount, if the market goes up forever, while what you've divested -- this is just mathematical. I'm not positing that this will happen.

COMMITTEE MEMBER JELINCIC: So what you're saying is firearms tripled, we would have a billion loss.

MR. JUNKIN: I'm sorry, yes. You did it right.

I did it backwards. The divested companies have to go up

1 more than the market to create the loss. Thank you. COMMITTEE MEMBER JELINCIC: But it --2 3 MR. JUNKIN: But you can --4 COMMITTEE MEMBER JELINCIC: It would have to 5 triple while the market stayed flat. 6 CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: 7 That's right. 8 MR. JUNKIN: But if the -- that's right. That's 9 right. Then you'd have the loss that would trip that \$750 10 million trigger. 11 COMMITTEE MEMBER JELINCIC: And the odds on that? 12 (Laughter.) 13 MR. JUNKIN: Not good. And that's -- I just 14 wanted to make sure everybody understand that point, so 15 it -- you know, thermal coal, I think what was the number 16 \$18 million when it came around. 17 CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: 18 180. 19 MR. JUNKIN: 180. You can still get to a loss 20 even at that size of a divestment. Fire arms may have been that small. 21 22 VICE CHAIRPERSON SLATON: Let's see I'm up. 23 So I think that the -- you know, the genesis of 24 this is comments from our fiduciary counsel kind of

generated -- because this has been going on for a long

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time, and now you've served up a proposed policy to us.

But what I didn't hear from the fiduciary was that there was a timeline associated with how fast or slowly this has to work. That the critical thing was to have a policy in place. So I'm not as worried that we suddenly have to react, whether it's tobacco, firearms, Sudan, that we suddenly have to go back in.

So I see whether it's a three and five, or something like that, I'm more comfortable with it being longer term, rather than shorter term, just because I don't feel an urgency to have to correct, as long as we have a plan to correct.

The other thing is I want to make sure that nothing in this policy detracts from our primary objective, which is engagement. So I don't want a policy like this to start to generate more divestment things coming at us. And, Wylie, you mentioned earlier that somehow the design of the policy might cause more divestment activity, you know, I don't think we want that to occur.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:
Neither does staff, I can assure you.

VICE CHAIRPERSON SLATON: And I'm not sure adjusting the numbers actually affects that one way or the other. I think it's our strength on the value of

engagement that is the bulwark to reduce this from happening.

The last point I want to make, although I know that thou shalt not be a market timer, but we arbitrarily in any of these disinvest -- divestment actions, we have just told you divest. I mean, boom, you're -- you need to go out of that. To me, it's just as problematic to tell you you're ordered to go back in. In other words, to me, it's taking it -- taking the prohibition off the table, which is different than saying go ahead and reinvest tomorrow.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yeah, excellent point. I would agree. And in the policy, we've included some language so that staff has some flexibility in terms of once the trigger has been met, we've come to the Board and said we're planning to reinvest, you don't stop us from doing that, that we have some discretion as to when and how that's done, so that we're not buying at the top of the market, for example.

VICE CHAIRPERSON SLATON: Right. Thank you.

CHAIRPERSON JONES: Okay. As I was returning, I happened to overhear J.J.'s suggestion about a third reading -- second reading and then come back with a third reading. I think that's an excellent idea, if -- yeah, so that we have an opportunity to -- because there's a lot of

meat here. And as you can see that there's still some various viewpoints that we need to continue to talk and to get out.

No fourth though, J.J.

Okay. Mr. Costigan.

COMMITTEE MEMBER COSTIGAN: Just a couple quick more points. First of all, Wylie and Ted, this is a great discussion. And I also think it shows how well versed this Board is and diverse this Board is in its thoughts, I mean, to have this type of discussion. And I thank Mr. Jones from making it a third reading, because there are a series -- still some more questions.

And the one that I have, and just to throw it out there, when you're talking about this next month, so this is when we get back in. So this is -- you know -- and it's a trigger to get back in. It's lost opportunity. I mean, this is -- the language confuses me. It's the lost value of money or the lost value of the investment. So sort of which begs the question which is on the front end. So this is a back-end solution. We've lost 750 million.

How do we reevaluate -- again, back to Ms.

Mathur's point, engagement is extremely important. So
we've engaged and then the asset missed 750 million. So
we missed that growth, and now we're getting back in. How
are we also evaluating the front end, because this is a

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1 back-end discussion? CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: 2 3 Yes, absolutely. And nothing in this policy 4 would change our focus on engagement as an element in all 5 of our activities, including any divestment related, save 6 legislatively driven, divestment. I think I understand 7 your question. 8 COMMITTEE MEMBER COSTIGAN: Well, I guess the --9 and I may not be articulating it well, is the fact is this 10 is -- three years from now the asset we divested is now 11 worth 750 million or more. It's hit some trigger, 12 correct? 13 CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: Тο 14 be clear, what's gone on there is we've divested. 15 COMMITTEE MEMBER COSTIGAN: Correct. 16 CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: 17 Yeah, and the asset in the index --18 COMMITTEE MEMBER COSTIGAN: Has grown. 19 CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: 20 -- has grown. COMMITTEE MEMBER COSTIGAN: Correct. 21 22 CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: And 23 we haven't enjoyed that growth.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

COMMITTEE MEMBER COSTIGAN: Exactly.

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That's the primary source of loss, based on the past divestments.

The other source of loss is material, so it's worth noting, that is that there's some transaction costs that are undertaken when we do divest. And those costs are removed from the fund in perpetuity. And so that's why we're including this reimbursement for costs.

COMMITTEE MEMBER COSTIGAN: No, I understand that. What I'm just asking is at the front end of that again -- and I may not be articulating it well, is we've divested. And so sometime down the road the asset that we divested from is worth more. So we're -- there's a trigger that causes us to go back in.

I'm just asking on that front end, back when we've made that original decision to leave, tobacco for example, what's the mechanism in place? I'm looking -- and we're talking about lost opportunity going forward. And I'm not articulating it well, but this is a back-end trigger. What's the front end for us to say, hey, you made lose 750 million in the future, you shouldn't do this?

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yeah, absolutely. We focused a lot on the stop -- the loss mitigation approach that we're proposing. But remember that at the beginning of the policy, your

stated divestment policy is to not divest. So that's what it says right up front. So your stated policy is you prefer engagement as an approach.

Divestment is not your preferred approach. As I mentioned, there's a wide variety of reasons for that. It removes your voice as a responsible owner. It's very -- there's an open debate as to whether divestment is even an effective tool to achieve the types of goals and aims that it might originally seek to achieve.

So your stated policy is to not divest. So whenever you divest, you're basically doing it in -- I would say you have to do it -- it's an exception to your policy -- your stated policy.

COMMITTEE MEMBER COSTIGAN: I understand. And this -- and, Mr. Jones, thank you again for the back door. We're going to have two more opportunities, because I do think this is a great discussion, and would like to revisit one of the policies we did last year with the Treasurer -- the prior Treasurer. So thank you. Thank you, Mr. Jones.

CHAIRPERSON JONES: Okay. Very good.

Mr. Junkin. And also, if you respond to a specific comment do so, but also any other comments, overall comments. And then, Allan, if you have any comments you want to share with the Committee. And I have

no further requests to speak. So after these two, we're going to move on.

MR. JUNKIN: Great. So I actually wanted to address Mr. Costigan's question. As divestments have sort of moved down the track towards sort of finally enacting them, Wilshire historically has been involved in evaluating and comparing quantitatively the current portfolio with a portfolio that has divestment enacted. And so we can look at what is the forecasted difference in risk and return. And so we can make judgments on how different does performance have to be to get to a \$50 million impact or a \$750 million impact, whatever that number is. So that historically has been something that has happened. We haven't had to do it in a while.

I think in the last hour and a half, you all have covered almost all of my points. And so I probably won't drive any of them home too much from here. I do think you all have hit really on the critical matters. One is the dollar amount for losses. I do think that the size of the divestment matters. And, you know, if you were to divest of some future industry that's six or seven percent of the global stock market, 750 million is going to be inadequate.

On the flip side, if firearms was \$20 million, you'll -- probably mathematically you could get there, but

you probably won't ever get there. And so maybe a way to get to that is to set the number as it is enacted, so you do get a dollar number, but it's relative to the size.

Just throwing that out there. That -- I don't mean to spring that on you. It just occurred to me while we were talking.

And I think that, you know, the automatic reinvestment, that does remove sort of the politics and the re-debating of issues. But if one of the things that we're focused on is very long-term risks, it could be the case that a divestment does not work for a very long period of time, trips a trigger, you're forced back into it right when the risks sort of manifest themselves.

And so you should just be very aware -- and I think this debate makes it clear that you are -- of something like that.

And then just last, a technical issue, methodology. We're still working on the methodology. That will be part of the second reading, because there are a couple of different methodologies in the Wilshire report. We'll settle on one, and that will be brought forward.

CHAIRPERSON JONES: Okay. Thanks.

Allan.

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MR. EMKIN: I'll be very brief, having dealt with

divestiture for 30 years with this Board.

(Laughter.)

MR. EMKIN: And you notice that I was choking, and it's made me choke for 30 years, because there's no issue that has caused more stress and more strain between the consultants and the Poured, the staff and the consultants, and amongst each other, and it deserves the level of attention you're giving it.

The dollar amount and the timing, in my mind, are technical. What's really important is the concept. And what you're addressing is something that has failed to be addressed for 30 years, and that is, well, we know how to go out the door, but we don't know how to get back in.

And what this does is create a financial basis that's unbiased for getting into things where the reasons you got out, which were you thought there would be excessive risk or lost return, had been proved not to be the case. And that's what's really important here.

You did it for a good investment, solid sound reasons. And guess what, sometimes you're wrong. And this gives you an opportunity to reverse that previous decision. So I really applaud the staff and the Board for taking this on. And you're right, it does need a lot more work.

CHAIRPERSON JONES: Okay. Okay. Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Sorry, Mr. Chair. Just a quick thing. I think I heard J.J. say earlier, and Andrew mentioned it also, whether the threshold or the trigger amount should be relative to the original divestment or relative to the fund. I think if we're thinking about it as a materiality threshold, it really has to be relative to the fund. I don't see how it can be relative to the investment.

So I would be supportive of sort of one. It's also simpler for the purpose of calculation. I just think it should be one threshold for the fund.

Thanks.

CHAIRPERSON JONES: Okay. Very well taken.

Okay. Thank you very much.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Thank you.

CHAIRPERSON JONES: Okay. We'll now move to the next item on the agenda.

INVESTMENT DIRECTOR CROCKER: All right. Thank you. Kit Crocker again speaking for CalPERS Investment Office staff. This is Item 9b, Revision of Affiliate Fund Policies and Repeal of Legacy Policies, the first reading.

As outlined in the memo for the agenda item, staff is proposing updates to the investment policies for the affiliate funds. This is primarily a reformatting

exercise to bring these policies more in line with the updated policies for the PERF.

Given this is a first reading, I will ask the Committee for any questions.

CHAIRPERSON JONES: Seeing no questions, thank you for your presentation.

INVESTMENT DIRECTOR CROCKER: Thank you.

Okay. We will move on now to Item 10, and that's a recommendation of proxy voting and 2016 voting plan.

(Thereupon an overhead presentation was presented as follows.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: I'm being joined by Anne Simpson and Dan Bienvenue. I'll give them a minute. So we're on 10a.

And just to remind the Chair, after the conclusion of this, I believe we'll be taking up 6b, which is the Global Governance Principles. And then next I think we also have 5a, which is the legislative update just to set everyone's expectations. We'll take them up in that order. Does that make sense?

CHAIRPERSON JONES: Yes, 5e and 6a.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Yes, right.

INVESTMENT DIRECTOR SIMPSON: Thank you very

1. This is Anne Simpson, Investment Director for

global governance. And as Ted said, I'm joined here by my

colleague Dan Bienvenue who co-chairs our new Governance and Sustainability Committee. So we're shoulder to shoulder on all things to do with governance and ESG.

The item that you've got in front of you is quite detailed. And we're doing two things. The first is we're looking back at the previous three quarters, because there's a tradition that we come to you and let you know what's going on every few months, but we've been very busy with other things. So that's a bit of a catch-up.

But we're also doing something new, which is part of the six-month ESG strategy review. This time we're actually looking ahead at what's coming up. And if we take a few minutes now, I'd just like to focus on the priority areas, which are proxy access and put that in context with our climate change work, and with our board diversity work.

I'll spend a couple of minutes on that, then maybe we can spend the rest of the time dealing with any questions that people may have.

So with that in mind, I'm going to go to page seven, slide seven.

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INVESTMENT DIRECTOR SIMPSON: Thank you, Wylie.

There's lots of background -- oh, thank you, Ted. It's team work.

There's lots of background on why proxy access, and I'll be glad to answer questions. And it's been quite the wild ride on this issue in recent years. But this, I think, is a good starting point for what happened this season looking back.

The first thing to note is we've teamed up with New York City. And in this partnership, New York has taken on the job of filing, and CalPERS has taken on the job of running proxy solicitations. We've also worked with other sister pension funds, including CalSTRS, VEBA, funds such as TIAA-CREF, Norges, T. Rowe Price, a broad coalition.

So I also wanted to emphasize here that in planning this campaign with New York, we decided to focus on three buckets of companies. We could have just started with the most -- the largest companies economically and worked our way down the portfolio, but we thought it was important to be very targeted with this particular tool.

So the first group of companies are those where climate change risk is to the forefront of long-term strategy thinking, and that's the energy sector.

The second group of companies we chose were where we saw boards that lacked diversity. Although, the caveat there is because current disclosure is poor, it's very difficult to make a fair assessment.

And thirdly, we focused on companies where we saw a big governance weakness, and that was typically where a vote by shareowners had won, but the company didn't actually implement.

So if we go to the next -- the next slide. Thank you, Ted. Slide 8.

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INVESTMENT DIRECTOR SIMPSON: This is really just an overview of where we've got to in this first year making this very big push. We closed out with 120 companies that had either been requested to or had decided to jump and not wait to be pushed. And great credit to them for doing so.

We also show you in the red and blue bar that on balance, we won the majority where these proposals came to the vote. And you can also see that in that block that the CalPERS engagement, which is where we worked with New York City to directly talk to companies, argue our case, listen to what they had to say. The number of proxy solicitations that we ran. This is where we filed with the SEC. We talked investors, to proxy voting firms, and so forth. And actually, we also attended 22 annual general meetings. So a big thank you to the team for a huge push.

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INVESTMENT DIRECTOR SIMPSON: So, Chair, I'll move just then quickly to looking ahead. And I'd like to go to, if Ted would be so kind, to slide 15. In the deck you'll see that we're explaining how we're focusing on important ideas in the Global Governance Principles. But because proxy access has proven to be such an effective tool, I just want to highlight for the Board what the plans are on climate change and on diversity.

So on slide 15, you'll see that in addition to continuing to vote in favor of proposals, this year, not just acting in support of others filing, we have co-filed three global mining companies. And shortly, we expect to be able to announce that each of those three will have been supported by the company management. That's extremely important, because this is no longer an issue on which shareowners and management should be divided. We want to see companies making common cause with the owners and guessing this right. So that's very encouraging.

We've also, through Ceres, been engaging companies in the energy sector through something called the carbon asset risk project. And a number of those companies we've won proxy access.

And what we're doing on this occasion is now coming back and we'll be supporting Ceres members by running proxy solicitations at 18 of those companies,

again to make sure that we get investor's attention. And we are also talking to some of those companies encouraging management to support the proposals, rather than opposing them.

We've also this season got 17 proxy access proposals directly at energy sector companies. And again, this will be the full faith and credit of CalPERS behind getting the vote out and we hope winning.

If we could now turn to page 17.

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INVESTMENT DIRECTOR SIMPSON: I'd just like to highlight where the proxy access campaign fits in with board diversity. Based on the proxy team's tracking of where we are, it looks as though we're going to have something along 20, 22 shareowner proposals directly on diversity this season.

We will support those where they're in line with CalPERS governance principles. But I do want to say that typically these types of principles have a very low level of support, and we don't think that they're moving the needle.

On proxy access, I'm glad to say that at the 20 companies we worked with New York on filing last season, 12 of those companies have since appointed a woman to the Board. We're not in a position, due to full disclosure to

make a comment about other dimensions of diversity, but we think that's a pretty encouraging sign that proxy access is the way to open this up.

I should say though we've got James Andrus on our team reminded me that proxy access board appointments don't always go your way. We did have one company, which following us winning the vote, appointed a gentleman of 91 years old.

(Laughter.)

INVESTMENT DIRECTOR SIMPSON: A caucasian. But that said, we do think that the potential of proxy access is really being felt, not just on key themes that CalPERS Board is committed to, but we think that there's some real momentum building.

New York has found out of the similar number of companies where they filed this year, and we're engaging together, a little less than half of the companies are agreeing to introduce voluntarily, and it won't be coming to the vote. So it might be that we have a slightly less busy workload this season.

So with that, I'd be glad to answer any questions.

CHAIRPERSON JONES: Yeah, we have a couple of questions.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: Back on slide 8, in the propose -- in the proposals up for a vote, of the 54 that passed, do we have any idea how many -- in how many cases the company says, well, it may have passed, but we're not going to do it anyhow?

INVESTMENT DIRECTOR SIMPSON: Sorry, I don't have that have, but we -- I know we're refiling, in our team work with New York, at 17. So that's a pretty good indicator that, at this stage, that's the number -- Nabors, the company that appointed the gentleman with many decades of experience to the board. That is an example of a company where it passed, but it wasn't implemented.

But I have to say we have been having detailed conversations with every single company, whether we won or it was a near miss, to talk to them about how to update their bylaws so that we get it implemented properly.

And through our work with the Council of
Institutional Investors, we now have a best practices
guide on how to do this when you get around to the rule
writing. And that's proven to be very useful.

COMMITTEE MEMBER JELINCIC: Okay. And in the company engagements and the proxy solicitations, I noticed that they're both 78. Is that a coincidence or did we do 78 proxy solicitations, and the 78 companies that we talked to, because they weren't cooperating?

INVESTMENT DIRECTOR SIMPSON: I think they go hand in glove. We obviously run a proxy solicitation where we haven't been able, with our fellow investors, to persuade a company to introduce proxy access. But I think the point that we're showing here is not just that we file off letters at the SEC, and run around drumming up the vote. In every single case, we've engaged the company. So it's been a persistent and constructive dialogue from our point of view. And I think that's one reason this campaign has worked so well is we've taken the time to have those conversations, but it's -- obviously, it's a lot of work.

COMMITTEE MEMBER JELINCIC: Do we have any indication of how many people we -- where we had company engagements and they agreed with us, and so we didn't have to go forward, or is that the 16 over in the first bar, or is the number bigger than 16?

INVESTMENT DIRECTOR SIMPSON: Yeah, it's a good question. The voluntarily adopted included some companies who had the conversation and said, please, don't take this to a vote. You know, it wasn't even our proposal Bank of America is an example of that. But then we had other companies, like Prudential, and General Electric, where they said, okay, well, this seems to make sense, and we want to be at the forefront of good practice and

And Prudential voluntarily adopted, without even receiving a shareholder proposal. So we're seeing that sort of response as well, which is very encouraging.

COMMITTEE MEMBER JELINCIC: So we -- at least at this point, we don't have a number of -- we don't have the number of companies that we engaged in, but -- and they simply said, yeah, that makes sense, and so we didn't go forward with a --

INVESTMENT DIRECTOR SIMPSON: We can provide that to you. As a follow-up, we can give you the breakdown.

COMMITTEE MEMBER JELINCIC: For my purposes, do you have just a ballpark?

INVESTMENT DIRECTOR SIMPSON: No, I don't.

COMMITTEE MEMBER JELINCIC: Okay. Then I'll let you follow up.

INVESTMENT DIRECTOR SIMPSON: It's less than 10, but -- is that a ballpark?

COMMITTEE MEMBER JELINCIC: Yeah. Yeah. I just -- just trying to get some general feel on, you know, how often we talk to people and that, you know, are successful in the engagement. If we did the proxy solicitation, obviously we weren't successful.

INVESTMENT DIRECTOR SIMPSON: It increased as the season went on. As we showed that we could win the votes, suddenly the conversation -- in the conversation we were

all the more persuasive.

COMMITTEE MEMBER JELINCIC: So it goes to the fact that negotiations is not a rational process, it's a power game.

INVESTMENT DIRECTOR SIMPSON: Teddy Roosevelt said, "Speak softly and carry a big stick". And I think that's really what engagement with proxy voting is that owners should ultimately have the right to intervene, but you want to start with a discussion and reach a consensus with the company. That's the real goal.

COMMITTEE MEMBER JELINCIC: Okay. Thank you. CHAIRPERSON JONES: Mr. Costigan.

COMMITTEE MEMBER COSTIGAN: Thank you, Mr. Jones. Anne, thanks. This is fantastic as usual. You guys do an amazing job. So I just have a couple questions. I'm not picking on any company. I just wan to make sure I understand this more.

In the report, and I'm just -- because it's -
J.M. Smucker's, for example. It just stood out. This is

more just on reporting. So, for example, on Smucker's, it

was, "Report on plans to increase renewable and

sustainable energy use", and the vote was 21 percent for

it. So I just want to -- these are probably very simple

questions. Is that 21 percent of the outstanding

shareholders -- of the amount of shares that voted, or 21

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percent of the votes cast?

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INVESTMENT DIRECTOR SIMPSON: Twenty-one percent of the votes cast, but I defer Todd Mattley who'se our head of proxy voting. He's sitting right at my side here.

COMMITTEE MEMBER COSTIGAN: Okay. I just have some -- just a couple questions.

INVESTMENT DIRECTOR SIMPSON: That's correct.

COMMITTEE MEMBER COSTIGAN: So that means that someone with one share has an equal weight, if we hold a million shares, at least the way this report, when it says 21 percent? So if you have 100 voters, 100 people casting, regardless of how much stock they own, that means that only 21 out of the 100 voted for this proposal.

INVESTMENT DIRECTOR SIMPSON: (Nods head.)
Correct, yes.

 $\label{eq:commutation} \mbox{COMMITTEE MEMBER COSTIGAN:} \quad \mbox{You were nodding your} \\ \mbox{head, is that --}$

INVESTMENT DIRECTOR SIMPSON: Yes.

COMMITTEE MEMBER COSTIGAN: So I am just trying to get a weighted average, because I'm trying to figure out, are we the -- back to Teddy Roosevelt, are we the big stick or are we a little stick?

INVESTMENT DIRECTOR SIMPSON: Or are we a feather duster?

COMMITTEE MEMBER COSTIGAN: So we're the big

stick, but -- okay. Second, what I'd like, Mr. Jones, to sort of better understand -- I'm just throwing it out there -- is where was the -- their board, for example, on these proposals?

So it's great to see where we were. Again, I'm not picking on Smucker's. It just happened to show up on my page. So only 21 percent of the vote. So what was the Board's recommendation, for example, what to do? Because I would be curious just to kind of see. I mean, it gives us a little more information as to where these boards are. Because I assume, for example, when we voted against certain board members, the rest of their board members said vote for them, for example.

INVESTMENT DIRECTOR SIMPSON: Um-hmm.

COMMITTEE MEMBER COSTIGAN: So I know we have that somewhere. And I know Wylie is making a note. Is it somewhere, Wylie?

INVESTMENT DIRECTOR SIMPSON: It's very unusual for management to support a shareowner proposal. That's why I think we had a real break-through last year with BP and Shell and later Statoil, whose management decided this wasn't something they wanted to fight, they wanted to support.

We, ourselves, have occasionally had a company ask us to help them with a proxy solicitation to get a

vote over the line. An example is Massey Energy, where they needed, at our and other investor's requests, to improve their governance following -- at the Big Branch mining tragedy, but they were really worried about whether they could get the vote out, because they needed to get 80 percent of all votes, all votes outstanding, in order to amend their bylaws, so we ran a proxy solicitation for them.

So I'm now looking at the fingers of one hand trying to remember times when there's been unity around a shareowner proposal or a shareowner solicitation for a management -- it's very unusual.

COMMITTEE MEMBER COSTIGAN: I guess what I'm just trying to figure out, for example, is that means that 79 percent voted against this proposal --

INVESTMENT DIRECTOR SIMPSON: Um-hmm.

COMMITTEE MEMBER COSTIGAN: -- for example. So who ran the opposition? And then on the next one, which is McKesson, the report on political contributions. Only 35 percent for, 65 percent against, which means somebody ran a no campaign.

INVESTMENT DIRECTOR SIMPSON: Yes.

COMMITTEE MEMBER COSTIGAN: And I'd just be curious at some point, how do you get more information like that? So if it's not the Board, who was it, or how

do you get to it? Because someone was doing it. I mean -- anyway, I just was trying to look for more information.

Thank you, Mr. Jones.

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CHAIRPERSON JONES: Okay. Yeah, Anne, on that -- Mr. Costigan's question, for example, when I'm looking at the compensation fail votes, you list all these companies.

INVESTMENT DIRECTOR SIMPSON: Right.

CHAIRPERSON JONES: Isn't that public information on how they voted --

INVESTMENT DIRECTOR SIMPSON: Yes.

CHAIRPERSON JONES: -- that answers his question?

INVESTMENT DIRECTOR SIMPSON: Yes.

CHAIRPERSON JONES: Okay.

INVESTMENT DIRECTOR SIMPSON: The -- for mutual funds at the end of the season, the votes are public.

It's a regulatory requirement. Typically, if management opposes a shareowner proposal or supports a management proposal, there's a big wave of loyalty that runs through the vote, because many investors have a policy of following management's advice which, for the most part, is not a bad thing. But where management faces a conflict of

CHAIRPERSON JONES: Is that public information by vote or just the total vote?

interest, for example on compensation, that is a problem.

INVESTMENT DIRECTOR SIMPSON: My understanding is that there isn't a requirement for all investors to disclose their votes. I mean, some do it voluntarily, like CalPERS. We disclose our votes now in advance. The mutual funds at the end of the season have to publish their votes. But you do not have the right to find out how the intermediaries, the mainstream fund managers, vote. The management's advice will be published in the proxy. And that, therefore, is readily available.

CHAIRPERSON JONES: Okay.

INVESTMENT DIRECTOR SIMPSON: I'm just going to check in with Todd because I can't see him and whether he's frowning at me. Thank you. Yeah, we agree.

But the -- Wylie is just making a good point that this is really the arena for the proxy voting firms, where what they're attempting to do is form a view of a vote, regardless of whether management supports it or which shareholder put it forward, to see whether it's in line with the pension fund or investor's policy.

Most of their clients have policies, and their job is to help them interpret them when a vote comes in front of them.

CHAIRPERSON JONES: Okay. Ms. Taylor.

COMMITTEE MEMBER TAYLOR: Anne, thank you so

25 | much. I really appreciate the work you do every year, and

I know it's a lot of work for your proxy voting. And having just come out of the off-site where we were talking about our ESG, seeing it in action, I'm really, really happy to see what we're doing here. I think one of the questions I had was, and I'm not sure if I understood it correctly, so we had votes on climate risk, but we -- and we were working with New York for that, is that correct?

INVESTMENT DIRECTOR SIMPSON: We had three categories of voting on climate risk. One is where a shareholder puts forward a proposal asking for improved risk reporting, for example, or to align compensation targets with climate change strategy. And with our Global Governance Principles, we will vote in support, because we have a view on that type of proposal.

The second bucket is where we worked with New York on proxy access, but we deliberately chose companies at the center of the climate change debate.

And this -- and then the third category, we dipped our toe in the water last year by working with a group of investors to see if we could file a proposal on risk reporting and win support for it. And having successfully won the vote, we've now said, okay, well, we can build on that. And this time, we've got the mining companies where we're co-filing, and another group of companies, 18 or more, where Ceres members have filed, and

we're going to help get the vote out and argue in favor of those proposals.

COMMITTEE MEMBER TAYLOR: Of the risk reporting?

INVESTMENT DIRECTOR SIMPSON: Correct.

COMMITTEE MEMBER TAYLOR: That's awesome. Thank you very much.

INVESTMENT DIRECTOR SIMPSON: Thank you.

CHAIRPERSON JONES: Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you.

Wow, what an undertaking of more than 7,000 votes in just one quarter. That's a huge undertaking by the Investment Office. And I just really want to commend all of you. I know it's not just -- your team obviously leads the effort, but there's significant engagement across the portfolio, I think, from what I understand.

INVESTMENT DIRECTOR SIMPSON: Yes. And it really is a team effort. Thank you for acknowledging that. I'd also like to acknowledge the work of the Legal Office, because when we file proposals or write letters to the SEC, they play an invaluable role. And also Public Affairs, because all of this generates a lot of interest in the media, and keeping track of that is work too.

COMMITTEE MEMBER MATHUR: Absolutely. Thank you for saying that, because I absolutely agree. And I think this report that you've brought to us is really good,

because you brought us some statistics and then some examples. And it really helps to sort of make it concrete all of this work that's being done, so I really appreciate that.

Now, a question for you looking forward. In terms of proxy access, now that we're beginning to gain proxy access at these companies, now we need to think about which candidates -- and we've already started thinking about it, but what candidates might be appropriate for us to support or sponsor or try to get elected.

Are we considering at all in the sort of list of criteria for such candidates, energy -- resource efficiency or resource management expertise to sort of synch it up with our climate agenda?

INVESTMENT DIRECTOR SIMPSON: Yes, thank you.

It's a good question. We've developed this understanding that a high quality board has three -- there's three dimensions. The first is independence, and I think that's been there for many, many years. We all understand you need an independent board. We've been very strong on diversity, because we know that group think was at the heart of the financial crisis. And if you don't have a diverse board, not only to you run that danger, you're not accessing the full range of talent that the company will

need.

But then the third area that we're starting to understand is the notion of competence. And there is some cross-cutting competencies that everybody needs, for example, financial acumen, or literacy, as it gets called. I don't know financial numeracy. But an understanding of finance, that's even a requirement on listing rules to have somebody on the audit committee.

But as we've come to engage companies, we are beginning to understand that for a company to make this 30 year transition away from where they are into what might be a very different future, both risk and opportunity is going to require a mix of skills that maybe the energy sector hasn't thought about before.

I think we've had a similar conversation after the financial crisis with financial institutions that having the great and the good on the Board isn't enough. You need people with a deep knowledge of the sector with an imagination, because people who are good at risk have imagination.

So we've had some conversations, for example, with Duke Energy, not last year, but the year before, where we had a nuclear company combined with a coal company and nobody on the board with deep, deep coal experience. Then they had a major environmental disaster

with the Dan River ash spill. And that was very good example, where you have to start with the company's strategy for the long term, then mount the skills and experience, then look at who you've got. And that is really the focus of our petition with North Carolina and New York and CalSTRS to the SEC, just to say we need disclosure on skills and experience that will allow us to map all of that which is relevant.

So in that, it seems if climate change is relevant to long-term strategy, then depending upon what your sector is, you absolutely need to have people with skills in environmental risk, with regulation, with transition, which is a very different form of business development, to just jogging along as usual.

COMMITTEE MEMBER MATHUR: I imagine even companies that are not energy companies or fossil fuel companies having some kind of efficiency competence is -- or at least interest is also going to be useful, because I mean every company has work to do I think in achieving greater energy efficiency and resource efficiency, water efficiency as well.

INVESTMENT DIRECTOR SIMPSON: Yes.

COMMITTEE MEMBER MATHUR: Another question sort of looking forward on CEO pay ratio implementation.

25 | That's an issue sort of coming down the pike at us. What

is -- how are you thinking about it, how is the Investment Office thinking about it, how are we going to incorporate that?

INVESTMENT DIRECTOR SIMPSON: Well, Calpers wrote in -- I mean, this a rule that came through Dodd-Frank. It was a legislative requirement for the SEC to write a rule that companies would express the ratio of the top to the median employee's pay.

And the SEC actually developed a really thoughtful memorandum to explain how they were approaching it. And they didn't take quick fixes. They said it had to be global. It had to include part-time employees. And we think that this is going to be a useful data point. However, it's like a chink of light into a very complex subject. You can't hang a lot on that one number. But I hope it does take us down a path of getting more data and more reporting on human capital management. And I think you'll recall that we worked with a group of funds after the tragedies in the Bangladesh garment factories with a group of retailers to develop a matrix, which would set out what, for long-term owners, we would like to see in terms of policy and practices and employee engagement right through the supply chain.

So we've found that there are useful tools that can be developed. It's not overly time-consuming. And

think companies in business for the long term will find that this is actually something that investors will welcome.

COMMITTEE MEMBER MATHUR: But do you expect these issues to become part of the proxy season? Do you expect any shareowner proposals do you think down the road around appropriate pay ratios or the outsourcing of lower paid work in order to boost CEO's pay ratio, or do you think any of that -- or maybe that -- maybe it's too premature. Maybe 2016 is not the year.

INVESTMENT DIRECTOR SIMPSON: Yes. And also the scope for shareowner proposals is quite narrow. If it's considered to be something that management should be dealing with, then typically these are proposals that won't get onto the ballot. It's considered -- so it has to be something which a shareowner could reasonably argue the board should be attending to. So that's in the realm of policy and practices and reporting.

But specific targets on pay, I want to turn around to Todd, but I haven't -- I haven't seen many of those.

Yeah, I mean, very difficult for it to come to the vote, because it would be considered management's prerogative. It's not the shareowner's job to cross the line on that issue.

COMMITTEE MEMBER MATHUR: Fair enough -- excuse me. Thank you.

INVESTMENT DIRECTOR SIMPSON: Thank you.

CHAIRPERSON JONES: Mrs. Yee.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman. I just also want to acknowledge, Anne, you and your team and this tremendous, tremendous volume of work, and just to let my colleagues know that CalPERS really is a recognized leader in this area of work, and particularly the one-on-one engagement with companies. I mean, it's just a tremendous commitment of time. And yet, we're seeing results as -- because of that work and just the consistency by which you and your team continue to engage is just really remarkable.

I appreciate the working in tandem with New York City. I think as we look at what's to come, obviously the scales can be very daunting, and so to be able to hook up with a sister agency is terrific. I wanted to see if there was a way to, I guess, chronicle or memorialize all this work. And I've said this in the past, because I think there's a bit of a unknown still with the public generally about how much work we are doing in this arena. And I know we're starting to disclose a lot more, and there's, been on our website, that there's a story to be told here. And I think as people look back at the work

that we've done, and the changes that are resulting from that work, it's really a great story to tell.

And the report today in terms of looking forward in the proxy goals for 2016, thank you for that. And I get the sense that with the enhanced focus on climate especially, that climate risk disclosure probably will, on its own as you continue to do this engagement, will find its way to the forefront. And we -- you will have done, you know, a lot up until that point. So thank you for the leadership.

To Ms. Mathur's point, one of the next items that we'll be taking up is about board competency. And as we look at the Global Governance Principles, I think it's important to begin to look at competency on boards with respect to climate. And whether it's experience in risk mitigation strategies or other types of -- and with that attendant to looking at opportunities as well, I think we're -- this is a great way to get out ahead of the curve with respect to what we anticipate will be some large scale changes outside of what we do on the day-to-day.

But I think it's fair to say the investor community collectively is moving. I don't know that I've seen this in the past and I'd be curious about your opinion about this. But there's really kind of a tandem effort going on about moving collectively within the

institutional investor community on climate, to where I think board competency has been prioritized relative to being sure that we are asking those questions about where's your experience, where's your expertise on climate risk mitigation.

INVESTMENT DIRECTOR SIMPSON: I agree with your observation, and I think it follows naturally on from the corporate governance work that's been done. So first of all, imagine until quite recently, certainly when I came to Calpers just after the financial crisis, it was very unusual to be able to vote no on a board director, so why would you worry about their qualifications.

COMMITTEE MEMBER YEE: Right.

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INVESTMENT DIRECTOR SIMPSON: And it was quite typical to have what are called staggered boards, where only a few would step down at any one time to the vote. So by focusing first on majority voting, on annual elections, and now proxy access. We've taken a building block approach to now we're at the point where we can be considering the qualifications of the people who are standing for election, because actually we can say no. And slowly, but surely, we're building an alternative platform if that's to be -- you know, if that's needed.

But it would -- this wouldn't have made any sense give years ago --

COMMITTEE MEMBER YEE: Sure.

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INVESTMENT DIRECTOR SIMPSON: -- because you wouldn't be able to give any practical -- there would be no practical course of action for you regardless if you had an opinion on that.

COMMITTEE MEMBER YEE: Right. Exactly. Is there a way to maybe work with communications or Public Affairs to look at how we can present this in a way that's a little bit more public user-friendly? Because this is important work, and I really don't want it to escape, you know, just the -- having the public's benefit of seeing, you know, where we're -- how we're creating change, and...

CHIEF INVESTMENT OFFICER ELIOPOULOS: Right. I was just writing down my list for the item that will come later today in terms of Board-directed items. That's certainly working with Public Affairs to put together communication materials around our proxy voting and engagement is a good idea. We'd -- we would support it.

And I have it on my list to see whether it will be Board directed. I'm guessing that it will be, but we'd work with Anne and the Public Affairs group to put some materials together, if that's the direction of the Board.

CHAIRPERSON JONES: Yes.

COMMITTEE MEMBER YEE: Thank you.

CHAIRPERSON JONES: Okay. Mr. Slaton.

1 VICE CHAIRPERSON SLATON: Thank you, Mr. Chair.

Building on what Controller Yee was talking about, first of all, thank you for the body of work. You know, it's -- I guess if I were a public company board member getting ready to attend an annual meeting and I looked at the list of attendees and Anne Simpson is on the list --

(Laughter.)

VICE CHAIRPERSON SLATON: -- I don't know, I just might not be quite as comfortable with the status quo.

But anyway, it's a great body of work. And I just -- this issue of climate change, risk management expertise reminds me that, you know, we had -- Congress passed a law in 2002, and it was called Sarbanes-Oxley, and it mandated that you had to have a financial expert on your board. And that was a result of Enron and WorldCom and, you know, some fairly bad situations that occurred, but the horse was out of the barn when they passed that.

And I think that one of the objectives here is to make this -- these kinds of moves before that happens, rather than as the fix afterward. So I applaud that.

I did have just a technical question, again going back to page eight of the presentation. And it's the proxy access resulting -- by the way, and, you know, you and I have had lots of conversations. To me, this goes to

the heart of the issue of investors being able to influence the behavior of the companies that we own.

And I noticed that you have 120 companies that have proxy access bylaws, which is split, the 16 and the 104. But I think your number is wrong on the 21 percent. By my calculation, if it's 120 companies that have it, that's 24 percent of the Fortune 500, so you might want to make that correction. You're actually doing a little better than what it says up at the top.

INVESTMENT DIRECTOR SIMPSON: It might be that what Todd, who is here with me and is absolutely scrupulous, is if they've adopted a proxy access law that's tougher than the SEC rule, maybe he's not -- you know, the skim milk proxy access. It's not the full fat.

VICE CHAIRPERSON SLATON: I see. So the 16 is not the -- is not the whole milk version?

INVESTMENT DIRECTOR SIMPSON: It may be. Let me check.

Oh, hello, Todd.

INVESTMENT OFFICER MATTLEY: Hi. Todd Mattley, Global Governance. What we've identified here is the total number of companies that have adopted a proxy access bylaw. Rightfully so, there could have been -- this is a fast-moving space, so there could have been some adoptions that may not be accounted for in the stats. So that's

1 | something that we could look at.

But the number of -- the 21 percent number was based on a post-season review that we did back in September.

VICE CHAIRPERSON SLATON: I see. Okay. Well, it looks like you may be doing better, if the 16 are -- meet the standards that have been set. And so my last question for you going forward, what is your prediction on when we will have a majority of the Fortune 500 where owners have proxy access?

INVESTMENT DIRECTOR SIMPSON: Comfortably by 2020.

VICE CHAIRPERSON SLATON: Okay. Good. Duly noted. We'll make sure to check that out and see how accurate you are.

Thank you.

INVESTMENT DIRECTOR SIMPSON: Thank you.

CHAIRPERSON JONES: Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: It was -- this is actually a follow-up on a number of them. But to Bill's point, is this 120 companies, are those only S&P 500 companies in this chart?

INVESTMENT OFFICER MATTLEY: Todd Mattley, Global Governance. That is across the universe, basically all domestic companies.

COMMITTEE MEMBER JELINCIC: So it could, in fact, be 21 percent, because the 120 are not necessarily all S&P 500.

INVESTMENT OFFICER MATTLEY: There are some smaller companies included in the universe, yes.

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committee member jelincic: Okay. Following up on Priya, I think one of the things that we ought to encourage companies to look at is not just contracting out lower paid jobs, maybe we ought to contract out some of the CEO positions. We could hire a bunch of Japanese, much, much cheaper than we're paying American CEOs.

And then I wanted to follow up on Richard's question on the votes as reported. And looking at Attachment 2, page six of nine, 1061 of the iPad, and picking on Smucker's. Vote results, 21 percent for. That's 21 percent of all the votes cast, and -- but Richard I thought asked if it was 21 percent of all those who had voted. So it was 21 percent of all the proxy cards turned in --

INVESTMENT DIRECTOR SIMPSON: Yes.

COMMITTEE MEMBER JELINCIC: -- were for it, as opposed -- or is it 21 percent of all the votes that were cast were for it?

INVESTMENT DIRECTOR SIMPSON: Of all votes cast.

COMMITTEE MEMBER JELINCIC: Okay. So it's 21

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   percent of the votes, not necessarily 21 percent of the
    shareholders?
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 3
             INVESTMENT DIRECTOR SIMPSON: Correct.
 4
             COMMITTEE MEMBER JELINCIC: Thank you.
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             CHAIRPERSON JONES: Okay. That's -- we have no
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    further questions on this item, and we thank you very
7
    much.
8
             Did you have anything else on Ms. --
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             INVESTMENT DIRECTOR SIMPSON: (Shakes head.)
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             CHAIRPERSON JONES: Okay. All right. Well, then
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   we now will move to the -- we'll go back up to our --
             CHIEF INVESTMENT OFFICER ELIOPOULOS: Mr. Chair,
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13
    I would suggest maybe we take up 6b now, which is the
14
   proxy -- or not the proxy, our global principles?
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             CHAIRPERSON JONES: Yeah. Yeah, I was going to
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    try and find on my -- go back and find it on my iPad, 6b.
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           Okay. Did I say 6a earlier or 6b?
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             Yeah, we've got to take a 10 minute break, so
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    let's come back at 3:30.
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             (Off record: 3:18 PM)
21
             (Thereupon a recess was taken.)
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             (On record: 3:31 PM)
23
             CHAIRPERSON JONES: And this is Item 6a that we
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   moved from the -- earlier this morning on the agenda to
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   here.
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Before we get started on this, I just want to, first of all, congratulate Ted and Anne for your leadership in this document, because it -- when we established the subcommittee, we had such a long way to go. And we have achieved so much in that process with -- under your leadership to get us to this point, because, as we know, the markets and the regulatory environment, and the political environment have changed the way we conduct business. And we are truly having to respond and be prepared to deal with these changing conditions.

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And I just also want to thank the subcommittee for their work on this product, and who did a tremendous job in helping guide the fruition of this particular document, and also other Committee members -- Investment Committee members, because almost all of them participated at some point in time in addition to the subcommittee.

So I just want to thank all of my fellow

Committee members, and thank you for your leadership in

bringing us to this point where we are today. So with

that, you got it.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Mr. Chair, thank you so much.

(Thereupon an overhead presentation was presented as follows.)

CHIEF INVESTMENT OFFICER ELIOPOULOS: And it

is -- it was a terrific process. What is before you is the recommended version after four readings of the Ad Hoc Subcommittee for a first reading. So Anne and I were talking in the break -- and it's been a long day, lots of policy documents -- we definitely want to address one item that Madam Controller and the Treasurer brought up by written letter to the Committee, as a suggestion to incorporate in the principles. So we'd like to take that item up for sure in this first reading, and we anticipate there being a second reading.

It's up to the Committee, we can -- Anne can make a three or four or five minute presentation. But as the Chair mentioned, you've -- many of you have seen this live, so we're more than welcome just to take questions, but no matter what, we'd like to address the Controller and the Treasurer's suggestion.

CHAIRPERSON JONES: Yeah. And so with that, I would like to ask the Controller and the Treasurer, do they want to make some comments regarding the letter that they did send.

Go ahead. Okay.

COMMITTEE MEMBER YEE: Thank you, Mr. Chairman.

And first of all, thank you to Ted and to Anne for devoting the time on, I think, really bringing some rationality might be too hash of a word, but certainly the

work that's been done to really tighten up the global governance policies. The Principles have -- it has been really remarkable and again a really great commitment of time.

We have -- Treasurer Chiang and I -- and I know Mr. Boyken will speak on this as well. But we have a letter that we have submitted. And I'd like to make it a matter of public record. And there are copies I believe available in the back for the public.

But it seems to me as we're talking about our global governance policies, that we should be looking at Section III(B)(9) where we're talking about director attributes. And after the presentation that just preceded this relative to the increasing focused attention on climate risk disclosure, I think it's incumbent upon us to look at, as we engage companies going forward, that -- and particularly in anticipation of probably many rules and regulations that will be coming down the pike relative to climate risk, that we do engage with respect to board competency on climate risk mitigation experience.

And this is an area where it's not just particular to any one sector of companies, but really, you know, just broadly, as -- and we know climate risk will be affecting the corporate sector in a pretty broad way.

So the letter suggests that we do include this

competency with respect to how we not only further become part of the action to meet the COP21 global accord, as other institutional investors are moving to try to assist, but also as we look at our own pension funds that we know that we are engaging with companies that have thought about and have deliberated within their companies about how best to address the impacts of climate change risk.

So I'm very happy to be submitting this letter for inclusion in the Global Governance Principles with an amendment to that section, along with Treasurer Chiang.

CHAIRPERSON JONES: Okay.

COMMITTEE MEMBER YEE: Thanks, Mr. Chairman.

CHAIRPERSON JONES: Okay. You're welcome.

Mr. Boyken.

ACTING COMMITTEE MEMBER BOYKEN: Thank you. I always like it when the Controller speaks first, then I don't have to say as much. But I just wanted to say on behalf of Treasurer Chiang, thank you for your leadership. Thanks for working with our office on the letter.

And we had a great discussion in that last item about the wonderful engagement that CalPERS does. And it's clear from your description that risk management is one of the competencies we seek. But it was important to the Treasurer, and I think to the Controller as well, to call out climate risk specifically. And that's what we're

asking, and it's pretty clear in the letter.

So thank you.

CHAIRPERSON JONES: Okay. You're welcome.

Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: I'm certainly not opposed to this, but I don't know that we really do, in fact, want to make it a requirement for all boards. If you look at a company like Oracle or McClatchy, quite frankly, you know, how much they know about climate risk is not particularly important, unless you're trying to influence their editorial pages.

You know, but -- you know, we also -- we have other concerns. You know, I think we should consider including that we want boards who understand that the companies have an obligation to tell owners what they are doing with our money in terms of politics and lobbying.

And that would factor across the whole universe. We could list lots and lots of requirements. So I'm not sure that, you know -- I don't say we should eliminate anybody from the Board because they have climate risk expertise, but I don't know that we -- that's really a requirement we want to propose for all boards, unless we're also going to say tell us what you're doing with our money in terms of lobbying.

CHAIRPERSON JONES: Okay. Well, Ted, go ahead

and proceed.

Wait a minute. Ms. Yee.

COMMITTEE MEMBER YEE: I know this appears like it's a pile-on, but I do think that climate risk is a pretty cross-cutting issue from those companies directly that have, whether it's energy, oil and gas, utilities, but I think even now supply chains of companies, you know, climate considerations are going to be at the forefront.

And I think already as we're going to see coming out of the Paris summit, there will be a lot that will be developed in the regulatory arena. And I just want to have companies be at the ready. I don't want them being caught flat footed. And frankly, as we look at the climate, I think as Ms. Mathur mentioned earlier, it's such a broad arena, that the considerations about, you know, just how companies are doing their business in -- with a broader consciousness about climate risk is going to be at the forefront of every company.

So it's not to say that those other issues you've mentioned, Mr. Jelincic, are not important. I mean, I actually support seeing more disclosure on those -- in those areas as well. But this one I think -- I feel like we have an opportunity to get out ahead of, and would like to see us adopt this.

CHAIRPERSON JONES: Okay. Mrs. Mathur.

COMMITTEE MEMBER MATHUR: Thank you. Well, I just want to support the Controller's and the Treasurer's recommendation. I think -- I mean, I made similar comments earlier. I think we're all -- we're in alignment on this. I think these are clearly financial issues that can impact the long-term sustainability of companies. And how companies manage important resources, it, you know, does expose them to greater or lesser risk, and how they manage their own business operations, if appropriate -- or if relevant, such as fossil fuel companies.

Well, a lot of the work we're already doing is so -- that's also so critical to the future success of these companies. I think it's absolutely appropriate to incorporate it today.

Thanks.

CHAIRPERSON JONES: Ms. Taylor.

Ms. Mathur and my support of the Treasurer's office and the Controller's office of this being incorporated into our governance revision. One of the things I think we need to remember is that every company, of the companies you even mentioned, J.J. -- I mean, Oracle uses precious metals that are mined. Those resources are becoming scarce. McClatchy uses paper.

So, I mean, I think it's very important that we

look at the resources, and we have somebody who has expertise in climate that can look at all the resources, whether it's water, whether it's our environment, whether it's clean air. I think it's very important that we do. So I am in support of including this.

Thank you.

CHAIRPERSON JONES: Mr. Slaton.

VICE CHAIRPERSON SLATON: Thank you, Mr. Chair.

I want to echo as well. I think any company that's of size enough for us to own, if they're not paying attention to climate, then they are already challenged, whether it be in supply chain, whether it be in their customer base. I mean you could name a whole host of reasons and issues that could come to bear. But I'm reminded also that our own governance policy has a list of skill sets that we should have on this Board as we govern this organization, and climate mitigation risk currently is not on the list. So maybe we should consider putting that on the parking lot and talking about it ourselves, if we're talking about companies that we own.

Thank you.

CHAIRPERSON JONES: Okay. Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: I'm not opposed to climate risk. I think people ought to be aware of it.

But if we're going to say these are the skill sets we

need, then we should also call out a commitment to management of capital and human resources. We should also call out a commitment to telling owners what you're doing with our money.

The objection is not to calling this one out.

It's just saying this is the one we're going to call out and we're ignoring all the other issues. And it's -- I also recognize it's a first reading, and some of those may show up in a second reading.

CHAIRPERSON JONES: Okay. Thank you.

Mrs. Hollinger.

COMMITTEE MEMBER HOLLINGER: Yeah, I just want to reiterate my fellow Board members who've also supported this letter from Controller Yee and Treasurer Chiang's office, and just express my support as well.

Thank you.

CHAIRPERSON JONES: Okay. Mr. Costigan.

COMMITTEE MEMBER COSTIGAN: Thank you, Mr. Jones.

Just two points. One, I support what both the Controller and Treasurer are trying to do. I think, as you guys recall, my former boss, Governor Schwarzenegger, really started a lot of this discussion back when we were doing AB 32 and RPS. So this has been -- it's great to see the rest of sort of corporate America catch up with us.

Sort of along the lines of what Mr. Slaton and Mr. Jelincic raised, and I just don't know the answer, do we require, for example, a member of a health company board to have health experience? We're calling out sort of something specific. So if you belong -- not picking on Health Net, but just because I know someone that works there, does -- do their board members -- do you have to have a health slot?

CHIEF INVESTMENT OFFICER ELIOPOULOS: That's a really good segue on the interplay of the discussion around is it every company, how long a list of attributes should we have, does it apply to every single company, whether it's health care or technology or otherwise? And I think the best -- the best thing is to actually -- just to turn to the section in the policy that -- under director attributes, because in seeing the Controller and Treasure's letter, our first staff assessment of it is that this is the section it would be appropriate to place any changes to the set of attributes, no matter what they are, before I get to the merits of climate change piece of it.

And if you look at the way that this section, and it is -- I'm looking at the red-lined version, so it -- depending on whether you like looking at the red-line or the original. In attachment 2, which is the --

CHAIRPERSON JONES: Ted, excuse me, what page is the red-line you're looking at?

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CHIEF INVESTMENT OFFICER ELIOPOULOS: So if you're looking at the red-lined version, it's Attachment 3, page 23 of 206. If you're looking at the clean version, which is Attachment 2 --

COMMITTEE MEMBER COSTIGAN: 168 of the iPad.

CHIEF INVESTMENT OFFICER ELIOPOULOS: Okay. It just depends whether you -- I always go to the red-lined, others like the clean version. The clean version is Attachment 2, page 16 of 38. So those -- either one, you'll look at the Paragraph B, Director Attributes. And what you'll notice about that paragraph is it talks about the board should establish and disclose a diverse mix of director attributes, experiences, perspectives, and skill sets that are most appropriate for that company.

And then it goes on to talk about, you know, at a minimum, expertise in accounting or finance, international markets, business or management, industry knowledge, governance, customer base experience perspective. So we do think -- we think it's tailored, and we think the way this is written is meant to flex with the experience needed for each member.

COMMITTEE MEMBER COSTIGAN: And that was kind of the point I was getting at is that it's a broader

experience. I mean, it's not necessarily a drill-down.

When you look at climate change, it cuts across all industries. When you look at financial risk, it cuts across all industries, not just -- it was an around about way of asking the question is while you may look at Health Net and say I need a specific, while they may be a health company, they're also an employer, and they're inside the community. And so you look at these higher level of attributions. So anyway, thank you.

CHAIRPERSON JONES: Okay. Thank you.

CHIEF INVESTMENT OFFICER ELIOPOULOS: And that's why we -- oh, I'm sorry.

CHAIRPERSON JONES: No, go ahead.

CHIEF INVESTMENT OFFICER ELIOPOULOS: In looking at -- in reviewing the Controller and Treasurer's letter, now turning to climate change expertise, we do think since climate change is, you know, our priority under E, of ESG, and is primarily a concern over risk and risk management, our staff recommendation is to include -- would be to include this. And this paragraph is where we had circled around looking at. And we hadn't discussed which paragraph it may or may not go into with the Controller. But great minds think alike.

So we think this would be the section the Board should consider, and we could certainly look at crafting

some language to include climate change expertise into here for the Committee's consideration on the second reading.

I do think you will then look at, you know, the question of, you know, how long a list of attributes you want. And that's a judgment call for the Investment Committee to weigh. If you have too, it maybe loses force and focus and effectiveness. But you want to make sure you have a focus on those big items that you -- that you're telling corporate America that you want them to consider in putting their mix of directors on boards.

CHAIRPERSON JONES: Yeah. And, Ted, I sense a majority of the Committee support the inclusion. So the direction is to include it for the second reading.

Any other comments?

INVESTMENT DIRECTOR SIMPSON: I just wanted to address two points Mr. Jelincic touched on. One is about responsibility for political activity -- charitable and political activity and disclosure. And we do have a section that's in there. And also, very important, that the Board, as a whole, is responsible for capital allocation, and that's in Section 7.

And where we say corporate strategy is one of the board's responsibilities, review and approve and guide capital discipline, allocation, et cetera, et cetera. So

we're identifying that as a board role. And then we're talking in the other section about the specific attributes that will enable the board to fulfill that.

CHAIRPERSON JONES: Thank you.

Mrs. Yee.

COMMITTEE MEMBER YEE: I wanted to just thank the staff and my colleagues on the Ad Hoc Subcommittee for really being able to identify the -- I guess, the issues that were kind of left still to be developed. And one area that I wanted to just highlight, because it's easy I think as we look at -- particularly ESG, maybe in their respective silos -- the issues in their respective silos and, that is the total fund emphasis.

I think as we look at the work to be done in our ESG strategic review, if we can kind of keep that concept in mind, because this is one of those areas where it's just really easy to kind of get siloed in terms of how we think about these issues. And yet, I think the goal here is to look at -- and hopefully be able to create a zone where we can better explore how to incorporate these considerations into other asset classes.

So thank you for the emphasis on that.

CHAIRPERSON JONES: Okay. Thank you. We have Mr. Jelincic.

COMMITTEE MEMBER JELINCIC: And just an

observation for when this comes back. We've actually identified a whole series of things that we didn't address that need to be addressed. And one of the things we should think about is whether the policy is ready to actually be adopted, if we have said, oh, and by the way, it's got these great big holes in it. So should we fill the holes before we adopt the policy? And I just give that -- throw that out as food for thought for the next meeting.

CHAIRPERSON JONES: Yeah. J.J., you're right, there were a number of issues that we sort of put on the white board, if you will. And those were to be addressed later, once we determined whether or not we needed to reestablish the subcommittee to deal with additional items. But we had concurred that we're going to move forward with the work that has already been done, and then we can revisit those. And we could determine how to revisit those as we go forward. Okay.

CHIEF INVESTMENT OFFICER ELIOPOULOS: I think that's exactly right, Mr. Chair. And I do think it's important to close the chapter on this revision process here. I think the improvements are substantial and needed. I think the parking lot, or white board, items we are taking and incorporating into the six-month review, as much of this is going to be a exercise of when and what

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resources you'd like us to devote to which activities over the next five years. And certainly revisiting and rewriting the policy is a set of work that needs to be thought of in terms of that five years.
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CHAIRPERSON JONES: Okay. Thank you. I see no further questions. So is that it?

CHIEF INVESTMENT OFFICER ELIOPOULOS: One last agenda Item 5e.

CHAIRPERSON JONES: Are you finished with this item?

CHIEF INVESTMENT OFFICER ELIOPOULOS: We're done with this item, yes. Thank you very much.

CHAIRPERSON JONES: Okay. Now, yeah, we have to go back to 5e.

INVESTMENT DIRECTOR SIMPSON: Thank you.

CHAIRPERSON JONES: You're welcome. Thank you.

5e, federal, right? Okay. 5e, Mr. Jelincic, you asked that this be pulled, so --

COMMITTEE MEMBER JELINCIC: Yeah, I --

CHAIRPERSON JONES: Your mic, please.

COMMITTEE MEMBER JELINCIC: I had a question about the second bullet under 2, the political disclosure. And I've talked with staff, and staff is going to fill us in. So I won't ask questions. I'll just let Doug fill us in.

DEPUTY EXECUTIVE OFFICER McKEEVER: Mr. Chair, Mr. Jelincic, members of the Committee. Doug McKeever, Calpers staff.

Mr. Jelincic, you're referring to filling you in at a later date once I get some clarity around the bullet that's unclear at the present time, correct?

COMMITTEE MEMBER JELINCIC: Yes.

DEPUTY EXECUTIVE OFFICER McKEEVER: Thank you very much.

COMMITTEE MEMBER JELINCIC: Yeah. And if you look at the bullet it says that the court said you can't go after the SEC because they didn't respond to your petition -- because they didn't respond. And so it becomes circular that as long as you file a petition with the SEC and they never say anything about it, then the courts are saying you can't force them to do anything.

And I'm not sure that's actually what the courts decided. And if it is, then they ought to make it clear.

GENERAL COUNSEL JACOBS: Good afternoon,

everybody. Matt Jacobs, General Counsel.

Mr. McKeever mentioned to me your question in passing just a few moments ago. And so I looked up the case real quickly, and I read the opinion.

Part of it is exactly correct that is the way you've characterized it is exactly what the court has

held. But part of it is also that the court -- the district court was saying, hey, if you've got a beef about this, you need to bring it to the court of appeal. I don't have any jurisdiction. I'm a district court judge. Anything concerning the SEC and whether it's failed to act or acted out of conformity with what it's supposed to be doing really needs to go to the D.C. circuit in the first instance.

COMMITTEE MEMBER JELINCIC: But it was an SEC motion to dismiss, so --

GENERAL COUNSEL JACOBS: Correct. So the -COMMITTEE MEMBER JELINCIC: -- the district court
told the SEC, you're in the wrong forum?

GENERAL COUNSEL JACOBS: Yes. Well, no, I'm sorry. The -- told the plaintiff. In other words, the plaintiff brought the action saying SEC shouldn't -- should be forced to act on my petition. And the SEC filed a motion to dismiss the plaintiff's case saying both you're in the wrong court, and the district court can't do anything about it anyway, or no court can do anything about it anyway. And the district court agreed with the SEC on both counts.

COMMITTEE MEMBER JELINCIC: So the SEC has said as long as we ignore you, there's nothing you can do about it?

1 GENERAL COUNSEL JACOBS: Right.

2 COMMITTEE MEMBER JELINCIC: Thank you.

GENERAL COUNSEL JACOBS: Okay.

CHAIRPERSON JONES: Okay. Thank you.

Just one comment on this item -- on this report under securities. Let's see, under 2, the -- one, two, three -- third bullet. And it's just awareness. We have been advocating race, ethnicity, and women on boards. And I've read a couple of proposals from different people. And they only say women. And I just want to be sure we have women of color also, so we don't lose that, because pretty soon the color aspect would be gone. So -- and I'm just looking at Senator -- representative Maloney's proposal, that she's -- first of all, she talks about race and ethnicity, but then she says she's going to propose only for women. So I support that wholeheartedly, but I think it should also be women of color included in that statement.

Okay. That's it. We have a request from the public to speak. Mr. Michael Ring.

MR. RING: Mr. Jones, members of the Committee, Michael Ring with Service Employees International Union. As you all know, we have a couple hundred thousand plus members in the system.

I'm just really here today on behalf of the

leadership and our membership to thank three sets of people. One is this Committee, second is all the workers, many of whom are members by the way, who do such great work to prepare the materials and do the research and the diligence to prepare all that comes to you. And then specifically I'd also like to thank Ted and his leadership team for the excellent work to try to really prepare this fund for a long-term sustainable approach to bringing the returns the fund needs.

I just think last month's discussions were very thoughtful on three forms of capital, the policy priorities. Our leaders are paying close attention to all the work you're doing and really appreciate all three sets of people coming together to try to figure out how we navigate some of these troubled waters in the short term, and really keeping the focus on the long term.

So I just wanted to thank all of you for your fair work, and Chairman Jones for his leadership as well as Ted.

Thank you so much.

CHAIRPERSON JONES: Thank you. It's always a pleasure, Michael.

Okay. That concludes the business of the Investment Committee. We now will go into closed session as soon as we -- Ted.

CHIEF INVESTMENT OFFICER ELIOPOULOS: We have the open session item to review Investment Chair directed items.

CHAIRPERSON JONES: Oh, thank you. I'm giving that as we go.

CHIEF INVESTMENT OFFICER ELIOPOULOS: So let

CHAIRPERSON JONES: I probably missed some.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

Yeah, so Ted and I, just as a way of triangulating to make sure we captured everything, we've both been taking notes independently. So there's going to be perhaps a little bit of reconciliation here in open session, as we make sure that both of our notes are accurate.

So first, I have that we're to verify that the Holocaust, Northern Ireland reports to the legislature can remain in consent per the legislation.

We've got a follow-up on exactly -- follow-up item from ourselves to meet with the Chair and Vice Chair on exactly how to report borrowed liquidity events, if, in fact, they happen in the middle of the month, not crossing over a month end. I think if they cross over a month end, you saw the report that you'll receive. It's just if they happen in the middle of the month we hadn't worked that

out.

We've moved -- we plan to bring back a second reading for the new changes to the divestment policy, and possibly a third reading, if needed, and --

CHAIRPERSON JONES: No, Wylie, there will be a third reading.

CHIEF OPERATING INVESTMENT OFFICER TOLLETTE:

There will be a third reading. Okay. Very good. So second reading and third reading and fourth reading, if necessary, is perhaps more accurately described, with some additional options to consider around the timing, the dollars, the calculation methods, and the notification to the Board language. Those are the items that I captured during that dialogue.

We plan to work with Public Affairs, following direction from Madam Controller Yee, around a communication strategy for the proxy voting activity. We also plan to include the language in the Controller and the Treasurer's letter around the climate change risk assessment skill in Section (9)(b) of the Global Governance Principles regarding board diversity.

And then finally, we're going to ask our federal representative to propose including women of color in the diversity language under board diversity in the K&L Gates memo.

CHAIRPERSON JONES: Thank you. CHIEF OPERATING INVESTMENT OFFICER TOLLETTE: Those were the ones that I have. Did --CHIEF INVESTMENT OFFICER ELIOPOULOS: Awesome. CHAIRPERSON JONES: I think you got them all. Thank you very much. Okay. So we will move right into closed session as soon as we can clear the auditorium. (Thereupon California Public Employees' Retirement System, Investment Committee meeting open session adjourned at 4:01 p.m.)

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I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing California Public Employees' Retirement System, Board of Administration, Investment Committee open session meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed, under my direction, by computer-assisted transcription;

I further certify that I am not of counsel or attorney for any of the parties to said meeting nor in any way interested in the outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 22nd day of February, 2016.

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